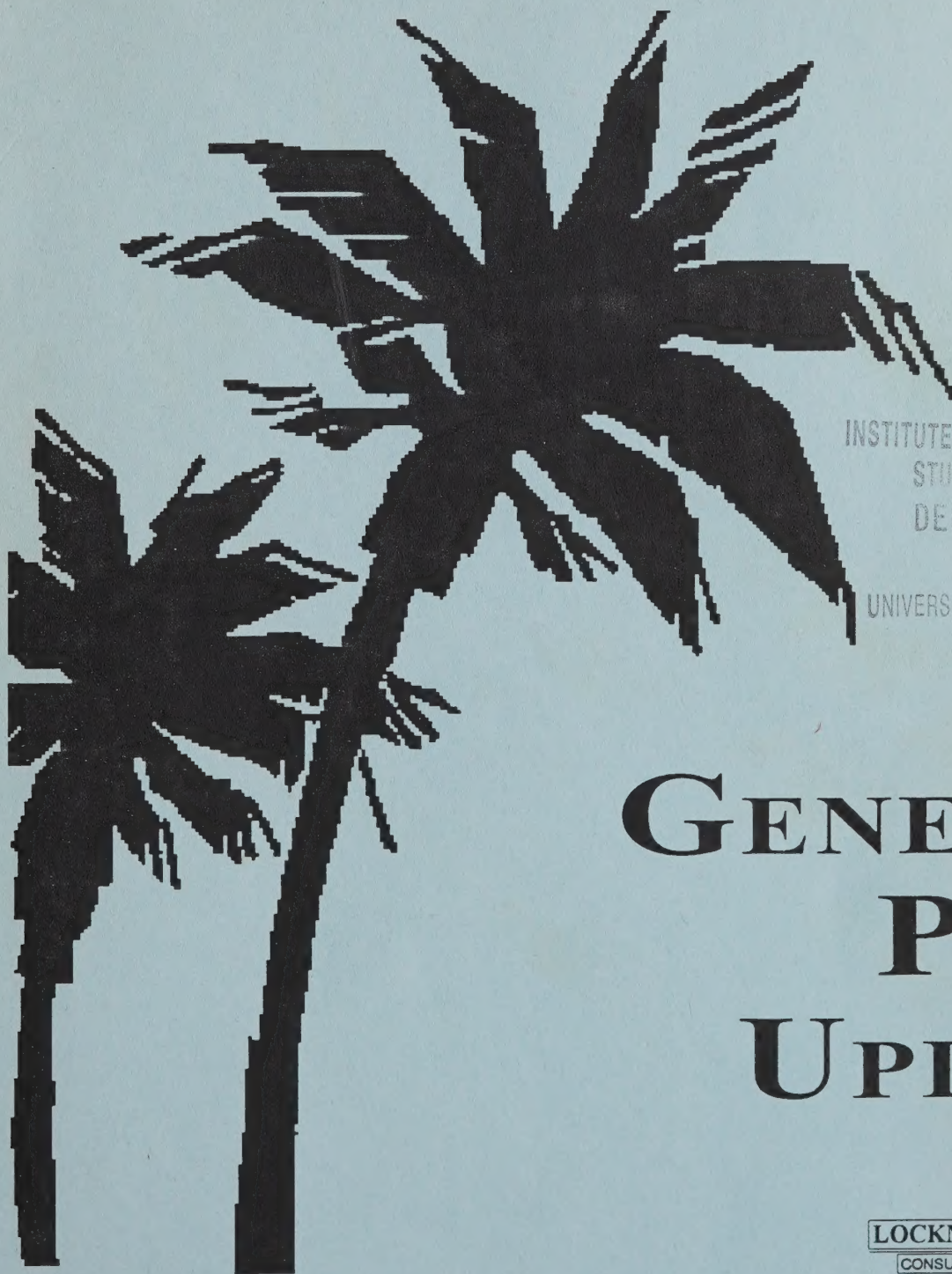

CITY OF HAWAIIAN GARDENS



INSTITUTE OF GOVERNMENT
STUDIES LIBRARY
DEC 5 2000

UNIVERSITY OF CALIFORNIA

GENERAL PLAN UPDATE

LOCKMAN & ASSOCIATES
CONSULTING ENGINEERS & PLANNERS

CITY OF HAWAIIAN GARDENS

GENERAL PLAN UPDATE

City Council

Robert G. Canada, Mayor
Robert Prida, Mayor Pro Tem
Lupe A. Cabrera
Kathleen Navejas
Domenic Ruggeri

Planning Commission

Ralph Cesena, Chairman
James Muse, Vice-Chairman
Thelma Deras
Esther Flores
Steve Peguero

General Plan Ad Hoc Committee

Esther Flores, Chairperson
Grant Winford, Vice Chairperson
Pedro Amaro
Susan Chaidez
Richard Medina
Paul Miller
James Muse
Richard Scism
Xavier Vasquez

CITY OF HAWAIIAN GARDENS

GENERAL PLAN UPDATE

City of Hawaiian Gardens

Nelson Oliva, City Administrator

Carl P. Holm, Community Development Director

Lockman & Associates - Consultants

M. J. Wagner, M.C.R.P., Project Principal

Michelle P. Leonard, Senior Planner/Associate

Stefan Bukojemsky, Senior Planner/Associate

Razmik H. Gozalians, R.E.A., Project Geologist

Heloise P. Froelich, Researcher

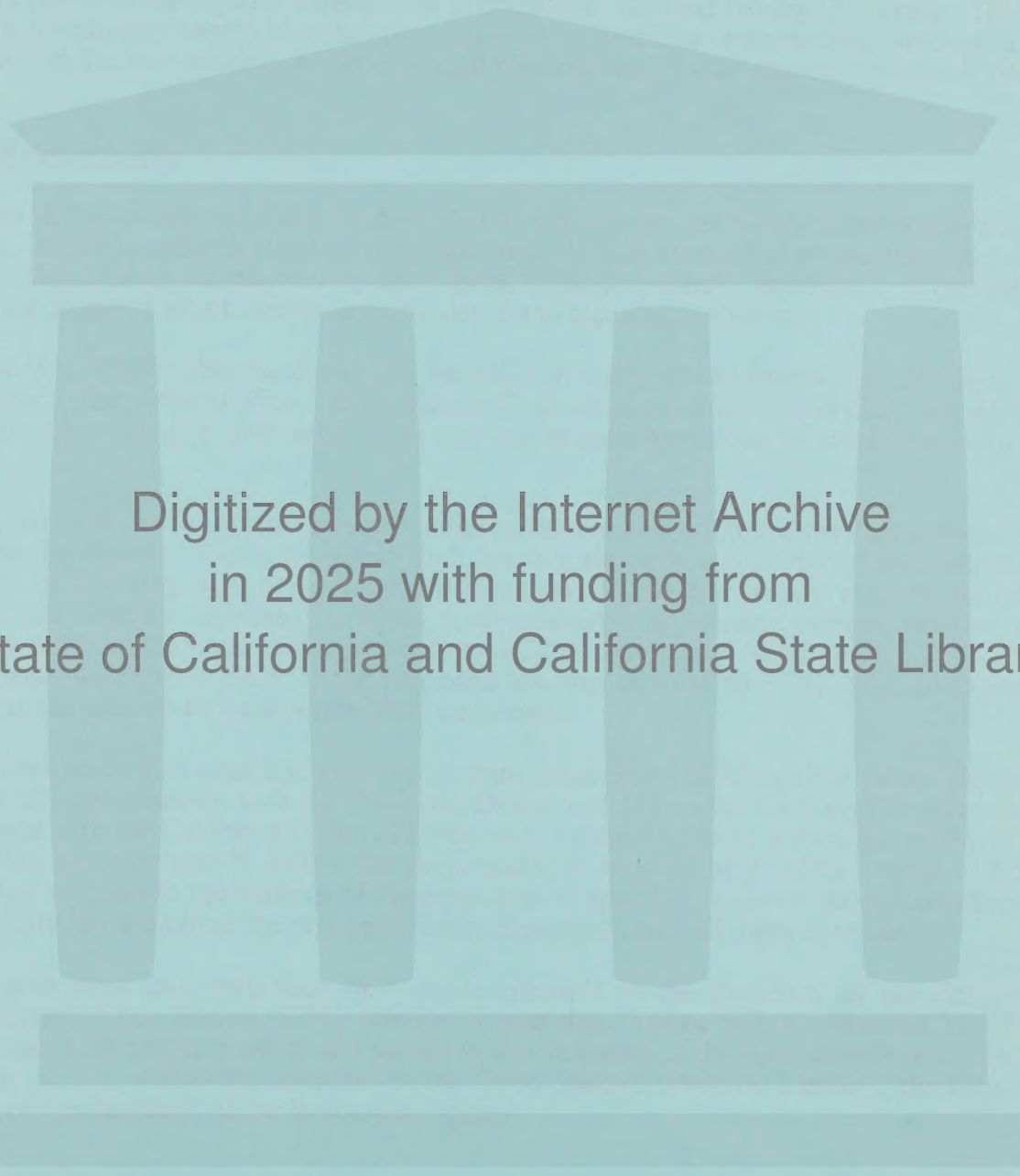
Brendan C. Halffman, Project Scientist

Alan M. Eide, P.E., Project Engineer

**CITY OF HAWAIIAN GARDENS
GENERAL PLAN UPDATE**

TABLE OF CONTENTS

	<u>Section</u>
INTRODUCTION	I
LAND USE	L
CIRCULATION	C
HOUSING	H
CONSERVATION	CO
OPEN SPACE/RECREATION	OS
NOISE	N
SAFETY	S
AIR QUALITY/WASTE	AQ
ECONOMIC DEVELOPMENT	E
CAPITAL IMPROVEMENT	CI
TECHNICAL APPENDICES	T



Digitized by the Internet Archive
in 2025 with funding from
State of California and California State Library

<https://archive.org/details/C101693038>

CITY OF HAWAIIAN GARDENS GENERAL PLAN UPDATE



LAND USE ELEMENT

LAND USE ELEMENT
TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	L-1
1.1 Planning Process	L-1
1.2 Statutory Requirements	L-1
1.3 Purpose and Intent	L-1
1.4 Community Profile	L-2
2.0 RESIDENTIAL USES	L-3
2.1 Introduction	L-3
2.2 Existing Conditions	L-3
2.2.1 Land Utilization	L-3
2.2.2 Land Use Patterns	L-3
2.2.3 Land Use Intensity	L-6
2.3 Issues and Concerns	L-9
2.3.1 Quality of Housing	L-9
2.3.2 Land Assembly	L-10
2.3.3 Recycling of Housing	L-11
2.4 Future Maximum Densities	L-11
3.0 COMMERCIAL USES	L-13
3.1 Land Utilization	L-13
3.2 Market Support	L-13
3.3 Business Rehabilitation	L-14
4.0 INDUSTRIAL USES	L-15
4.1 Land Utilization	L-15
4.2 Land Use Compatibility	L-15
5.0 PUBLIC USES	L-16
5.1 Introduction	L-16
5.2 Schools	L-16
5.3 Library	L-18
5.4 Fire Services	L-19
5.5 Police Services	L-19
5.6 Civic Center	L-19
5.7 Hospitals	L-19
5.8 Churches	L-20
5.8 Public Use Needs	L-20
6.0 GOALS, OBJECTIVES AND POLICIES	L-21

TABLE OF CONTENTS

(Continued)

	<u>Page</u>
7.0 LAND USE MAP AND CLASSIFICATIONS	L-36
7.1 Land Use Map	L-36
7.2 Land Use Classifications	L-36
7.2.1 Residential Designations	L-36
7.2.2 Commercial Designations	L-38
7.2.3 Industrial Designations	L-38
7.2.4 Specific Plan Area	L-38
7.3 Quality Development	L-38
7.4 Land Use Map Changes	L-38
8.0 IMPLEMENTATION PROGRAMS	L-41
8.1 Development Regulations and Enforcement Programs	L-41
8.1.1 Changes to Zoning Ordinance	L-41
8.1.2 Subdivision Ordinance Update	L-41
8.1.3 Code and Ordinance Enforcement	L-41
8.2 Adverse Impact Mitigation Programs	L-42
8.2.1 Interjurisdictional Coordination	L-42
8.2.2 Development Agreements	L-42
8.2.3 Environmental Review	L-42
8.2.4 Economic Revitalization	L-43
8.2.5 Community Redevelopment	L-43
8.3 Areas Proposed for Recycling and/or New Development	L-43

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1 Existing Land Use	L-5
2 General Plan Land Use Map	L-37
3 Areas Proposed for Recycling and/or New Development	L-44

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Existing Land Use	L-4
2. Average Density of Residential Land Use Districts 1992	L-7
3. Maximum Allowable General Plan Residential Land Use Densities	L-8
4. Building Intensity	L-9
5. School Enrollment, Design Capacity and Growth, 1985 and 1992	L-17
6. Potential School Redistribution	L-18

1.0 INTRODUCTION

1.1 Planning Process

The planning process in the City of Hawaiian Gardens is similar to that of most cities within the State of California, which have exercised their rights of self determination through the land use authority granted by enabling legislation. In Hawaiian Gardens, the planning process is administered by the Planning Department staff, with policy recommendations from the City's Planning Commission, and final policy determinations by the City Council.

In 1973, the City adopted a General Plan which was intended to be a long-range guide for the City's growth through the year 1990. In 1986, the City adopted a revised Land Use Element. As conditions have evolved over the past six years, it has become increasingly apparent that the City's Land Use Element is in need of providing updated policy direction to accommodate future development within the community through the year 2012. The City Council has also requested that the updated Element provide the level of detail that would enable maximum coordination between the public planning efforts and private development/redevelopment interests in realization of the long-range goal of upgrading the overall quality of the land uses throughout the City.

1.2 Statutory Requirements

All City and County General Plans are required by State law to have a Land Use Element. The Government Code, specifically Section 65302(a), requires that land use elements:

...designate the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan...

1.3 Purpose and Intent

In the past, General Plans and particularly land use elements were considered to be a very broad policy guide to subsequent actions where specific decisions would be made and would not be necessarily binding on local legislative action. General Plans have since increased in status because State Law now requires that zoning be consistent with the adopted General Plan, and because the law requires denial of approval for any subdivision and/or project approval that is not consistent with the General Plan.

The Land Use Element is the most important of all elements required in the General Plan, because it integrates all of the other Elements into one unit. Within the Element are policy statements governing the future land uses of the City. Along with the land use direction, there will be statement of, and action items to attain, consistency between the General Plan and Zoning Ordinance. State law clearly states that the General Plan must emphasize the importance of zoning by defining the purpose and nature of the Zoning Ordinance, and its consistency with the land use plan of the General Plan. The attainment of consistency lies in the degree of compatibility between the policies in the General Plan and the regulatory devices available in the Zoning Ordinance. The Zoning Ordinance in turn, should be considered consistent with the General Plan when the allowable uses and respective standards contained in the Zoning Ordinance

further the policies of the General Plan, and do not inhibit or obstruct the attainment of those articulated policies.

1.4 Community Profile

The City of Hawaiian Gardens is 0.9 square miles, or 22.5 square kilometers. It had a population of 13,639 persons according to the 1990 Census. The population per square mile is 15,154.4. The City of Hawaiian Gardens has one of the highest persons per square mile in the Southeast Area of Los Angeles County; by way of comparison, Artesia is 9,665, Bellflower is 10,133, Cerritos is 6,188, the Long Beach-Lakewood Division is 8,368. The City is exceeded only by the City of Huntington Park, which has 18,085 persons per square mile. Outside the southeast area, the Lennox area of Inglewood has 18,964 persons per square mile, and the City of West Hollywood has 19,009 persons per square mile.

2.0 RESIDENTIAL USES

2.1 Introduction

The discussion and policies regarding the residential environment of the community are divided into two areas. The first section describes the existing conditions of residential development within the City. The subsequent section identifies various concerns regarding the existing residential areas, and identifies action items to resolve the problems.

The Housing Element provides a much greater level of detail on residential trends than is attempted to be addressed in the Land Use Element. Although many issues and related policies may overlap and cause some repetition, this chapter is not intended to meet the State housing element requirements. This section is intended to provide direction for residential enhancement and development as it relates to the overall General Plan Program. The Housing Element addresses the specific requirements of State Law as it relates to housing elements. This differentiation is important to avoid the necessity of amending the entire General Plan as a whole to comply with future amendments to the housing element requirements prescribed by the State Department of Housing and Community Development.

2.2 Existing Conditions

2.2.1 Land Utilization

A land use survey was conducted by Lockman & Associates in May 1992. Table 1 shows the breakdown of the developed land uses. The results of the survey show that approximately 277 acres, or 62 percent of the existing land use, is residential. As can be seen from Table 1, approximately 147 acres, or 32 percent of the total developed area, contain single-family units. Parcels containing two units per parcel account for 13 percent of the existing land uses, and multiple-family developments account for 12 percent.

2.2.2 Land Use Patterns

The City can be categorized as having four definitive residential land use districts: 1) low-density single-family; 2) two-family residential; 3) high-density multiple-family; and 4) mobile home park. There are only three areas within the City that are specifically intended for single-family uses: the north and south side of 212th Street; the east side of Belshire Avenue between 216th Street and 214th Street; and the east side of Juan Avenue south of 214th Street. Additionally, the north and south sides of 213th Street are intended for agricultural, single-family uses. The existing pattern of land use throughout the City is shown in Figure 1, "Existing Land Use".

For the purpose of describing general residential land use patterns, the entire southern portion of the City, south of Carson Street, has been developed with two family residential uses. This generalization does not apply to any of the areas located along either Carson Street, or Norwalk Boulevard or for properties located between Belshire Avenue and Hawaiian Avenue, north of 221st Street.

TABLE 1
EXISTING LAND USE

Land Use	Acres	Percent of Total Utilization
Residential		
Single-Family	146.8	32.6%
Two-Family	60.5	13.4%
Multiple-Family	52.7	11.7%
Mobile Home	<u>17.0</u>	<u>3.8%</u>
Subtotal:	277.0	61.5%
Commercial	66.1	14.7%
Industrial	30.0	6.7%
Public	43.9	9.8%
Hospital	8.9	2.0%
Religious	2.8	0.6%
Parks	3.1	0.7%
Vacant	<u>18.1</u>	<u>4.0%</u>
Total:	449.9	100.0%






Note: Does not include streets and other public rights-of-way

Source: Lockman & Associates, May, 1992

CITY OF HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

EXISTING LAND USE

-  RESIDENTIAL
 - SINGLE FAMILY
 - TWO FAMILY
 - MULTI-FAMILY
 - MOBILEHOMES
-  COMMERCIAL
 - RETAIL / OFFICE
 - SERVICE
-  INDUSTRIAL
 - OFFICE / MANUFACTURING
 - SERVICE
-  INSTITUTIONAL
 - CIVIC CENTER
 - PARK
 - HOSPITAL
 - CHURCH
 - FIRE STATION
 - SERVICE ORGANIZATIONS
 - UTILITY
-  - VACANT

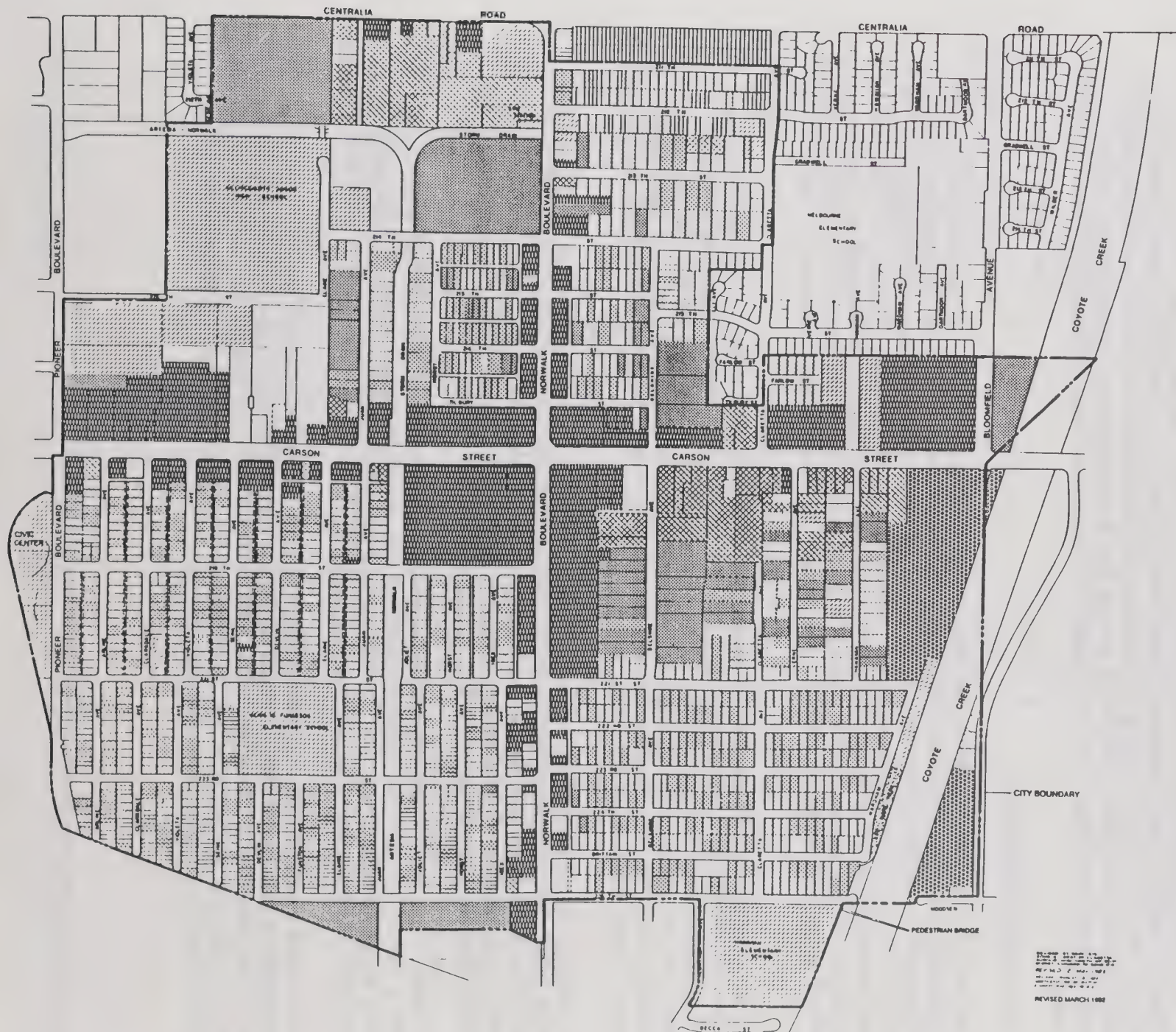
5 - 92 FIELD SURVEY FROM PUBLIC R.O.W.



LOCKMAN &
ASSOCIATES

1

FIGURE



REVISIONS
NO. 1
DATE
BY
REASON
NO. 2
DATE
BY
REASON
NO. 3
DATE
BY
REASON
NO. 4
DATE
BY
REASON
NO. 5
DATE
BY
REASON
NO. 6
DATE
BY
REASON
NO. 7
DATE
BY
REASON
NO. 8
DATE
BY
REASON
NO. 9
DATE
BY
REASON
NO. 10
DATE
BY
REASON
NO. 11
DATE
BY
REASON
NO. 12
DATE
BY
REASON
NO. 13
DATE
BY
REASON
NO. 14
DATE
BY
REASON
NO. 15
DATE
BY
REASON
NO. 16
DATE
BY
REASON
NO. 17
DATE
BY
REASON
NO. 18
DATE
BY
REASON
NO. 19
DATE
BY
REASON
NO. 20
DATE
BY
REASON
NO. 21
DATE
BY
REASON
NO. 22
DATE
BY
REASON
NO. 23
DATE
BY
REASON
NO. 24
DATE
BY
REASON
NO. 25
DATE
BY
REASON
NO. 26
DATE
BY
REASON
NO. 27
DATE
BY
REASON
NO. 28
DATE
BY
REASON
NO. 29
DATE
BY
REASON
NO. 30
DATE
BY
REASON
NO. 31
DATE
BY
REASON
NO. 32
DATE
BY
REASON
NO. 33
DATE
BY
REASON
NO. 34
DATE
BY
REASON
NO. 35
DATE
BY
REASON
NO. 36
DATE
BY
REASON
NO. 37
DATE
BY
REASON
NO. 38
DATE
BY
REASON
NO. 39
DATE
BY
REASON
NO. 40
DATE
BY
REASON
NO. 41
DATE
BY
REASON
NO. 42
DATE
BY
REASON
NO. 43
DATE
BY
REASON
NO. 44
DATE
BY
REASON
NO. 45
DATE
BY
REASON
NO. 46
DATE
BY
REASON
NO. 47
DATE
BY
REASON
NO. 48
DATE
BY
REASON
NO. 49
DATE
BY
REASON
NO. 50
DATE
BY
REASON
NO. 51
DATE
BY
REASON
NO. 52
DATE
BY
REASON
NO. 53
DATE
BY
REASON
NO. 54
DATE
BY
REASON
NO. 55
DATE
BY
REASON
NO. 56
DATE
BY
REASON
NO. 57
DATE
BY
REASON
NO. 58
DATE
BY
REASON
NO. 59
DATE
BY
REASON
NO. 60
DATE
BY
REASON
NO. 61
DATE
BY
REASON
NO. 62
DATE
BY
REASON
NO. 63
DATE
BY
REASON
NO. 64
DATE
BY
REASON
NO. 65
DATE
BY
REASON
NO. 66
DATE
BY
REASON
NO. 67
DATE
BY
REASON
NO. 68
DATE
BY
REASON
NO. 69
DATE
BY
REASON
NO. 70
DATE
BY
REASON
NO. 71
DATE
BY
REASON
NO. 72
DATE
BY
REASON
NO. 73
DATE
BY
REASON
NO. 74
DATE
BY
REASON
NO. 75
DATE
BY
REASON
NO. 76
DATE
BY
REASON
NO. 77
DATE
BY
REASON
NO. 78
DATE
BY
REASON
NO. 79
DATE
BY
REASON
NO. 80
DATE
BY
REASON
NO. 81
DATE
BY
REASON
NO. 82
DATE
BY
REASON
NO. 83
DATE
BY
REASON
NO. 84
DATE
BY
REASON
NO. 85
DATE
BY
REASON
NO. 86
DATE
BY
REASON
NO. 87
DATE
BY
REASON
NO. 88
DATE
BY
REASON
NO. 89
DATE
BY
REASON
NO. 90
DATE
BY
REASON
NO. 91
DATE
BY
REASON
NO. 92
DATE
BY
REASON
NO. 93
DATE
BY
REASON
NO. 94
DATE
BY
REASON
NO. 95
DATE
BY
REASON
NO. 96
DATE
BY
REASON
NO. 97
DATE
BY
REASON
NO. 98
DATE
BY
REASON
NO. 99
DATE
BY
REASON
NO. 100
DATE
BY
REASON

The largest area developed with high-density multi-family residential uses is located south of the industrial properties on Carson Street, and north of 221st Street between Hawaiian and Belshire Avenues. Additional high density multi-family areas are located west of Juan Avenue, midway between 214th and Carson Streets and the Creekside Condominium Project, located north of 214th Street, between Norwalk Boulevard and the storm drain channel. The remaining high density multi-family areas include the Belshire Condominium Project, on the east side of Belshire Avenue just north of Carson Street, and the Hawaiian Gardens Apartments, located on Centralia Road just east of Violetta Avenue.

There are two mobile home parks, containing a total of 244 mobile homes, within the City of Hawaiian Gardens. The Lakewood Estates Mobile Home Park contains 200 mobile home units, and is located on Carson Street, at the southern terminus of Bloomfield Avenue. The Bloomfield Mobile Home Park contains 46 mobile homes, and is located on the eastern border of the City, north of Woodsen Street, between Bloomfield Avenue and the Coyote Creek Flood Control Channel.

2.2.3 Land Use Intensity

The purpose of examining the overall densities of existing residential districts is to provide an understanding of the prevailing intensity of residential uses throughout the community. In comparison to most suburban communities, the City of Hawaiian Gardens can be categorized as having an overall high residential density. This is partially attributed to the small lot sizes which were created at the time the community was originally subdivided. A summary of the overall densities of the various residential districts throughout the community is shown in Table 2. The ratio of number of dwelling units to net acreage has been employed to analyze the existing density.

The areas within the City devoted to single-family uses include both agricultural and traditional single-family districts. Areas intended for agricultural uses have generally been developed as 6,000 square-foot lots. Utilizing the ratio of number of dwelling units to acreage, the overall density of the agricultural lots equals seven units per acre. By comparison, single-family dwellings within the City have been developed on small 2,500 square-foot lots, and the prevailing density in these districts is 8.4 dwelling units per acre.

The majority of residential areas within the City allow for the development of two units per parcel. The development standards of the R-2 multi-family medium density residential zone allows one unit per 2,500 square feet of lot area, hence, the maximum development density in this zone is approximately 17 dwelling units per acre. The densities achieved in this area are similar to the prevailing densities of the single-family residential district.

An Intermediate Density land use classification is proposed under the General Plan which would allow a density of up to 19 dwelling units per acre at various locations where a reduction in density is desired. However, with the incorporation of affordable housing units, projects in these areas could be developed at the higher density of 24 units per acre.

Development standards for the high density multiple-family zone permit the development of townhomes, condominiums and apartments utilizing a density ratio of one unit per 1,820 square feet of lot area. Although other development standards for the district, as delineated in the Zoning Ordinance, must also be met to realize the maximum intensity, the formula equates to an allowable density of up to 24 dwelling units per acre.

TABLE 2
AVERAGE DENSITY OF RESIDENTIAL
LAND USE DISTRICTS

Residential Use	Average Minimum Lot Size	Prevailing Density (Dwelling Units per Acre)
Single-Family (Agricultural Zones)	6,000 sq. ft.	7.0
Single-Family (Low Density)	2,500 sq. ft.	8.4
Multiple-Family Residential (Medium Density)	5,000 sq. ft.	17
Multiple-Family Residential (Intermediate Density)	2,292 sq. Ft.	19
Multiple-Family Residential (High Density)	1,820 sq. ft.	24
Mobile Home Park	N/A	15

Source: Lockman & Associates, 1994

The two mobile home parks within the City have been developed at various densities. The Lakewood Estates Mobile Home Park, located on Carson Avenue, is approximately 12 acres in size and contains 200 mobile home units. This equates to a density of approximately 16 units per acre. The Bloomfield Mobile Home Park, located at the City's eastern boundary, is a 3.5-acre park containing 51 mobile homes. The density at this project is approximately 14 units per acre. The development standards for the Mobile Home Park Zone allows for a maximum density of one unit for each 2,000 square feet of land area, not to exceed 21 units per acre.

Maximum allowable population and land use densities for residential uses are listed on Table 3. Persons per occupied unit is taken from the 1990 Census data.

Table 4 lists the building intensities of each land use/zone type. Coverage varies from 50 to 65 percent, height from 25 to 35 feet. In all zones, front yard setbacks are 20 feet, side yard setbacks are 5 feet, and rear yard setbacks are 10 feet. Various additional requirements are listed in the City's Zoning Code.

TABLE 3
MAXIMUM ALLOWABLE
GENERAL PLAN
RESIDENTIAL LAND USE DENSITIES

Residential Use	Units/ Acre ⁽¹⁾	Acres	Max. Pop./ Acre ⁽²⁾	Total General Plan Max. Pop.
Single Family- Low Density (R-1)	8.4	29.0	33.6	974
Two Family (R-2)	17.0	156.5	68.0	10,642
Multi-Family (R-3,4)	24.0	78.3	96.0	7,516
Mobile Home	15.0	17.0	60.0	1,020
Total		280.8		20,157 ⁽³⁾

Notes:

- (1) Based on Actual Density
- (2) Based on 1990 Census of 4.0 persons per unit
- (3) Maximum population is theoretical only

Sources: U.S. Bureau of the Census, 1990; Lockman & Associates, 1992

TABLE 4
BUILDING INTENSITY

Land Use Type Zoning	Coverage	Height	Front Yard	Setbacks Side Yard	Rear Yard
Low Density:					
A-1	50%	35'	20'	5'	10'
R-1	50%	35'	20'	5'	10'
Medium Density:					
R-2	60%	35'	20'	5'	10'
Intermediate Density:*					
R-3/R-4	65%	35'	20'	5'	10'
High Density:					
R-3/R-4	65%	35'	20'	5'	10'
Mobile Home Park:					
MHP	65%	25'	20'	5'	10'

* Proposed Land Use Classification permitting a maximum of 19 D.U.'s/acre.

Source: Hawaiian Gardens Zoning Ordinance, 1989

2.3 Issues of Concern

2.3.1 Quality of Housing

In general, the existing residential areas within the community are in good condition (source: Municipal Services, Inc., Housing Element Update, 1989). Approximately 84 percent of the City's housing stock in 1989 was in good condition, needing no, or only minor property maintenance, such as paint or landscape work. Twelve percent of the City's housing stock was in need of minor to moderate repairs, involving less than \$3,000 worth of maintenance. Hence, approximately 96 percent of the residential units were in relatively good shape in 1989.

Approximately 2.0 percent of the City's residential units were in need of major repairs. Major repairs are defined in the survey as repairs which will cost over \$3,000, and need to be done by an outside contractor, rather than the property owner. Approximately 1.6 percent of the City's total units were beyond repair or were being renovated.

In isolated areas, there are concentrations of deteriorating units and/or poorly maintained parcels that give the entire surrounding neighborhood a negative appearance. The areas of concentration are widely distributed throughout the community, in fact, deteriorated units and/or poorly maintained parcels are found in each of the City's three census tracts.

The causes of deterioration within the community are varied. The relative age and quality of the original construction, the materials used in construction, inadequate buffering between incompatible land use districts, the premature upzoning of low-density areas, the proliferation of two-family units on undersized parcels, and personal values, have all contributed to residential deterioration. While all of these factors have a direct contribution to housing stock decline, there are more subtle, often overlooked factors that indirectly affect the quality of residential areas within the City, including the nature of property tax laws and the process of housing filtration.

2.3.2 Land Assembly

Land assembly is the procedure where, either through public participation or totally private involvement, contiguous parcels are merged into a single development area for the purpose of realizing comprehensive development. The General Plan recognizes the difficulties faced by a public agency or private individual in assembling land for the purposes of recycling or developing comprehensive projects. The City's current Redevelopment Plan does not provide the authority for the Redevelopment Agency to condemn residential properties.

Without utilizing this redevelopment tool, the Agency is in a similar situation as any private individual wishing to assemble land, namely that land can only be purchased and assembled through negotiation with individual property owners. Implied in this process is the possibility of increased sale prices through speculation, thereby hampering the expediency of accomplishing subsequent development.

The majority of the City's new residential development has occurred within the multi-family districts of the City. While new development has been a welcome improvement to the community, the nature and physical configuration of the development has been less than optimum. The majority of the new residential development has occurred on narrow deep lots in a piecemeal fashion; the net result being long lineal buildings on one side of the lot, and driveway access to garage areas on the opposite side. Very little open space has been provided over and above the minimum required, and the preponderance of open space has been delegated to private rather than common open space (patios, balconies, etc.). Very little consideration has been given to common amenities such as pool and spa areas, playground areas, or outdoor seating and eating areas.

At the root of this problem is the issue of land assembly. Obviously, the more area available to design a project, the more area available to design efficient site plans with common usable outdoor open spaces. The direct impact of encouraging parcel mergers would be not only an upgrading in the quality of future multi-family projects, but also an upgrade in the livability of the units for the future residents.

The same theory applies to the undeveloped 25 x 100 foot lots within the City. Presently, the City's Zoning Ordinance permits development of one unit for each 2,500-square feet of area within the medium.-density R-2 districts. In the past, various standards and modifications have been required to realize development on these parcels, because the setback and garage requirements of the zone could not be met. Consideration must be given to the development rights of the property owners, however, in circumstances where two contiguous, 2,500 square foot lots exist, the City should encourage a merger of the lots and subsequent development of a two-family residence, rather than two single-family units on individual parcels.

2.3.3 Recycling of Housing

The Housing Element details the conditions of housing throughout the community, and notes that most problems exist in the R-2 areas, especially the R-2 areas located within the southwest portion of the City. To recycle housing, the Redevelopment Agency desires to implement three housing programs described as follows:

2.3.3.1 Single-Family Lots Program

This program will include the acquisition of substandard homes that are for sale from time-to-time, the clearance of the home and the construction of a new single-family "for sale" home. Units will be acquired by negotiation, pursuant to all requirements of the California Redevelopment Law.

2.3.3.2 Rehabilitation Program

This program will include the acquisition of single-family substandard units suitable for rehabilitation. Rehabilitation will be conducted similar to the Community Development Block Grant Program. Owner-occupied units may be rehabilitated without relocating the owner, depending upon the nature of the work to be undertaken. Non-owner-occupied units may also be rehabilitated; however, the emphasis will be on developing home ownership. Acquisition of units will be the same as for the Single-Family Lots Program described in Section 2.3.3.1 above.

2.3.3.3 Land Assembly/New Development

This program will include the acquisition and assembly of land pursuant to all of the powers and requirements of the Agency, including relocation, demolition and the construction of a variety of single-family, owner-occupied housing units.

2.4 Future Maximum Densities

A review of the proposed General Plan land uses and the allowable maximum densities indicates that 5,037 residential units could be accommodated in the future. At a median occupancy rate of 4 persons per unit, the General Plan would allow a total population of 20,148, which represents a 32 percent increase over the existing (1990) population.

Actual development potential, based on an analysis of available parcels, is as follows:

2.4.1 South of Carson and West of Norwalk Boulevard

This area is a single-family neighborhood that is currently zoned R-2. This area currently supports 113 multi-unit parcels and is capable of supporting at least 429 additional units. Approximately 600 feet of sewer and 1,500 feet of water main will be required to support all 429 units.

2.4.2 South of 221st Street and East of Norwalk Boulevard

This area is a single-family neighborhood that is currently zoned R-2. This area currently supports 141 multi-unit parcels, and is capable of supporting at least 183 additional units. Approximately 600 feet of sewer and 1,900 feet of water main are necessary to serve the development.

2.4.3 East of Norwalk Boulevard Between Carson Street and 221st Street

This area is transitioning from high density and single-family density to all high density. Approximately nine acres are available for assembly and development of about 180 units. Approximately 1,800 feet of water main and 1,200 feet of sewer are required to serve this development.

2.4.4 North of Carson Street

This area is capable of supporting at least 67 new units. No capital improvements are necessary to support these units; however, approximately 2,500 feet of water main is required to adequately complete the water system.

The increase for these four areas totals 859 units. At four persons per unit, this will increase the population by 3,436 persons, or bring the total population to 17,075 persons at complete "build out".

3.0 COMMERCIAL USES

3.1 Land Utilization

Commercial land uses account for approximately 14.7 percent of the total land uses within the City. Generally speaking, commercial land use activities occur along the City's arterial roadways, Norwalk Boulevard and Carson Avenue (see Economic Element Appendix for specific uses). For purposes of the General Plan analysis, the commercial land uses have been consolidated into one group including: retail commercial, service commercial, office commercial and mixed commercial uses. The following is a brief description of commercial land use categories as they are shown on the existing land use map (refer to Figure 1).

Retail commercial activities include food stores, apparel and accessory stores, furniture stores, gasoline stations and similar types of retail enterprises. Service commercial activities include banks, private financial institutions, automobile services and other enterprises which provide services to the community for monetary consideration. Office commercial applies to those parcels within the City which are used primarily for office activities such as professional medical services. Mixed commercial uses have been categorized as those parcels which contain more than one of the aforementioned commercial uses. Typically, shopping centers containing a combination of retail and service activities are included in the mixed commercial category.

3.2 Market Support

In terms of commercial activities, the City of Hawaiian Gardens is one of the "hidden suburbs" of Los Angeles County, which, until recently, was bypassed by commercial investors and shoppers. This was partly caused by the absence of major retail magnets in the City, which would attract sizable patronage from nonresidents. Today, Home Base, Plowboys Market, Cousin Jack's and the bingo parlor draw customers from beyond the immediate area. Surrounding competition from nearby cities, especially Cerritos, have made it difficult to recruit new regional service commercial facilities. The demographic character of Hawaiian Gardens also has hampered the commercial land use pattern. The relatively small total population and limited income base have historically discouraged major retail companies from developing local serving outlets in the City.

The City has been altering its market position through concerted planning actions and recruitment. Some commercial development opportunities have been capitalized upon. Additional opportunities for shopping and retail sales may be available to the City. A substantial part of the economic challenge facing the City is the implementation of appropriate planning actions. The amount of land which most cities allocate to commercial uses is on the order of five to eight percent of the City's total area. In Hawaiian Gardens, approximately 13.6 percent of the land uses are currently devoted to commercial uses. Considering the lack of major employment centers in the City and the market response of the local business sector, this figure is excessive for local use but is suitable for regional serving uses.

Commercial overzoning in some areas has been counter productive in Hawaiian Gardens. Rezoning existing single-family parcels to commercial uses has resulted in both a loss of housing stock and in the assembling of only marginal commercial sites.

3.3 Business Rehabilitation

Hawaiian Gardens needs to continue to address the problems of existing marginal businesses. The existing Commercial Rehabilitation Program, comprised of low-interest loans or rebates for facade improvements, has and will continue to improve the appearance and vitality of the City's commercial strips. This program, coupled with efforts to encourage the consolidation of viable businesses into clusters, can also have a positive effect on the community. The clustering concept would improve the visibility of individual outlets and increase the probability that potential customers will "stop and shop" along the Carson Street and Norwalk Boulevard corridors. Consolidation should also be accompanied by improved design standards.

4.0 INDUSTRIAL USES

4.1 Land Utilization

Industrial uses constitute 30 acres, and represent 6.7 percent of the overall land uses within the City. For purposes of the General Plan discussion, there are two separate areas within the City where industrial uses occur. The predominant industrial district is located on the south side of Carson Avenue, from the east side of Hawaiian Avenue to the west side of Belshire Avenue. The second industrial district is located on the south side of Centralia Road, west of Norwalk Boulevard. The size and characteristics of these two industrial areas are discussed below.

As previously stated, the predominant industrial area is located on the south side of Carson Avenue. This area contains 30 parcels, totaling 13 acres. There are very few vacant parcels remaining in this area, and the existing establishments have little space to expand. The majority of the area was subdivided during the 1940's and 1950's, when industrial uses did not require the expansive floor areas that are required by today's standards. In previous decades, industrial uses in urban areas tended to increase floor area through vertical expansion, which was feasible even on limited lot sizes. In recent years, the trend in industrial uses has been horizontal expansion, which requires lots or surrounding properties which are conducive to industrial development. Hawaiian Gardens not only has small industrial lot sizes, but also has very limited sized industrial areas which are generally bounded by multiple-family residential areas with little expansion potential.

Two separate developments comprise the City's other industrial area. The Centralia Business Park is located just west of Norwalk Boulevard and consists of approximately 10 acres. The units are arranged with offices in the front of the unit and expansive open shops with rollup doors in the rear. These units are conducive to light manufacturing and assembly operations. The second portion of this industrial area is a mini-storage warehouse on Norwalk Boulevard. This project is contiguous to the Centralia Business Park.

4.2 Land Use Compatibility

In developing long-term land use policies, it is generally accepted that a community should be balanced, and offer residents employment opportunities within the City. The compact and confined nature of the City's industrial areas provide little opportunity to meet these demands. The development patterns adjacent to industrial areas provide limited opportunities to expand the City's employment base in manufacturing, the predominant trade of the City's workforce. Recognizing this factor, the land use plan attempts to strengthen and consolidate existing areas and, to the extent possible, to harmonize the interface of land uses, especially where multiple-family uses abut potentially obnoxious industrial uses, such as those that emit undesirable noise or odors.

5.0 PUBLIC USES

5.1 Introduction

The purpose of the public use section of the Land Use Element is to analyze the existing level of various community services, and to identify the public uses that will be accommodated within the adopted land use plan.

5.2 Schools

School facilities and operations within the City are the responsibilities of the ABC Unified School District. The District currently operates three schools within the corporate boundaries of the City, including two elementary schools and a junior high school.

The Venn W. Furgeson Elementary School, located on the northwest corner of the intersection of 223rd Street and Elaine Avenue, serves students between grades K through 6, living in the southwestern portion of the City. Hawaiian Elementary School, located on the south side of 226th Street at Claretta Avenue, serves students in grades K through 6 living in the southeastern portion of the City. Elementary school children residing in the northern portion of the City attend the Melbourne Elementary School, which is located in the City of Lakewood (immediately adjacent to the City limits), at the terminus of 214th Street and Claretta Avenue. Killingsworth Junior High serves students at the 7th and 8th grade levels. The school is located north of 215th Street at Elaine Avenue. The City's high school students (9th through 12th grades) attend Artesia High School, located on Norwalk Boulevard at Del Amo Street, in the City of Lakewood.

A review of the 1985 and 1992 student enrollment for the local schools serving the City of Hawaiian Gardens indicates increases at the elementary school level, and decreases at the junior and senior high school levels. Table 5 shows the June 1985 and April 1992 enrollments at the respective schools serving Hawaiian Gardens. It is important to note that the design capacity for each of the schools (as noted in the first column of Table 5) is based on 85 percent of the school's actual capacity, and that schools can operate above 100 percent capacity with the addition of portable classes.

One possible way to redistribute student loads is to develop Killingsworth Junior High as a 6th through 8th grade junior high school, and accept 6th graders from only Melbourne and Furgeson Elementary Schools. Redistribution, assuming that the 6th grades represent one-seventh of total enrollment, is indicated in Table 6.

In this redistribution scheme, Furgeson and Melbourne 6th graders attending Killingsworth would be required to cross one major street. Hawaiian is the furthest from Killingsworth, and would require students to cross two major streets. For this reason, Hawaiian was not included in the redistribution.

TABLE 5
SCHOOL ENROLLMENT, DESIGN CAPACITY AND GROWTH
1985 AND 1992

School	Design Capacity	Enrollment (June 1985)	Enrollment (April 1992)	% of 1992 Design Capacity	Percent Change (1985 to 1992)
Elementary:					
Furgeson	784	636	750	96%	18%
Hawaiian	724	537	610	84%	14%
Melbourne	784	604	697	89%	15%
Junior High:					
Killingsworth	860	760	548	64%	(28%)
High School:					
Artesia	2,000+	1,901	1,720	86%	(10%)

Note: Design capacity assumes 85% capacity; schools can operate productively to 100%. Increases in attendance beyond 100% can be accommodated through the use of portable classes.

Source: A.B.C. Unified School District, 1992

TABLE 6
POTENTIAL SCHOOL REDISTRIBUTION

School	Design Capacity	Enrollment April 1992	Assumed 6th Graders	Students after Redistribution	New Percentage of Design Capacity
Elementary:					
Furgeson	784	750	90	660	84%
Hawaiian	724	610	0	610	85%
Melbourne	784	697	86	611	78%
Junior High:					
Killingsworth	860	548	176(1)	724	84%

Note:

(1) Redistributed from Furgeson and Melbourne Schools

5.3 Library

The Hawaiian Gardens Library is located at 12100 East Carson Street. The facility is approximately 4,000 square feet and has a collection of about 12,000 books. The library is operated through a cooperative agreement between the City and the County of Los Angeles, Department of Libraries. The library is run by one full-time librarian, three aides and two part-time pages.

The County Department of Libraries generally uses the standard of 1.5 books per capita to assess whether a library is adequately stocked to meet local needs. Utilizing this standard, the current library is approximately 8,000 books short of the standard, or about 70 percent deficient. The major reason for this deficiency is the lack of funds for both books and space. In fact, funds are so scarce that library hours have been severely cut.

5.4 Fire Services

Fire protection and suppressing services are provided to the City through an agreement with the County of Los Angeles Fire Department. Fire Station 34, located at 21207 South Norwalk Boulevard, is the jurisdiction station. The Station has one Captain, one Engineer, one Firefighter, and one pumper truck. The Station building was constructed by local residents and donated to the County many years ago, and is in need of major rehabilitation. The existing site is inadequate by modern fire station standards, and therefore, attempts should be made to direct the relocation of the station to a more appropriately sized and convenient location.

5.5 Police Services

Police services within the City are handled through an agreement with the Los Angeles County Sheriff's Department. Sheriffs are dispatched through the Lakewood Sheriff's Substation. While there is no station within the City, deputies continuously patrol the City 24 hours a day and backup officers can be called from surrounding contract cities such as Artesia and Lakewood. In addition to regular patrols, the Sheriff's Department helicopter, known as "Skyknight Patrol", does fly overhead an average of twenty minutes during the night hours and provides backup assistance on an as-needed basis. A full-time "community relations" officer is also provided to the City to enforce the City's Municipal Code and provide liaison services with the business community.

5.6 Civic Center

The City's Administrative Complex is located at 21815 Pioneer Boulevard. The Civic Center Complex was completed in 1980 and contains approximately 210,000 square feet of building area, including 10,000 square feet of administrative offices for City Departments, the City Council Chambers and the Chamber of Commerce office. The complex also contains a 30,000 square foot activities center that includes basketball courts, weight lifting and gymnastics facilities, arts and crafts area and dental operatory. Senior citizen functions currently operate out of the activities center. The Public Works Department is housed at the far southern portion of the complex. The Public Works Yard includes a 2,000 square foot garage and office area. The Civic Center Complex is currently being expanded to include 3,133 additional square footage to the City Hall for Agency/Council, Planning Department and Redevelopment Administration uses. Because of the potential for conflicts between gym activities for the young and the seniors program, the Senior Center will be modified as part of the Civic Center expansion project.

5.7 Hospitals

Charter Community Hospital, an FHP-managed facility, is located at the intersection of Pioneer Boulevard and 215th Street. The hospital is the only medical facility within the City and is an acute care "for profit" private hospital. The facility includes 150 beds, maintained by 55 active physicians and a total support staff of 120. The hospital maintains a 24-hour emergency care facility. The hospital provides numerous levels of community outreach and educational programs. Included in the hospital complex is a medical office building that accommodates 45 physicians covering all specialties of medical care.

The Los Angeles County Department of Public Health Services currently leases 2,330 square feet of office/clinic space at the Lee Ware Park Facility. This medical clinic includes the multi-purpose room and one office. The clinic operates Monday through Friday from 8:00 a.m. to 5:00 p.m.

5.8 Churches

There are eight churches in the City of Hawaiian Gardens. Six are located in areas designated for residential land uses and the other two are in Commercial/Industrial areas. The Land Use Map has been revised to re-designate the six residential church sites for Institutional land uses. The purpose for the re-designation is to recognize the ongoing significance and importance of these institutions in the City and to designate these properties in accordance with their current usage.

5.9 Public Use Needs

As discussed in Section 5.4 above, a site for the development of a new fire station will be considered in developing the new Land Use Map.

6.0 GOALS, OBJECTIVES, AND POLICIES

Goals and objectives have been developed and presented for each of the General Plan Elements. To be effective and meaningful, each of those goals and objectives must be compatible with the overall goals of the City and of the Land Use Element, which combines all input from those elements into the physical land use plan for the future development and change of the community.

The Land Use Goals are intended to provide long-range guidelines toward which the City will proceed through the normal course of day-to-day planning, decision-making and administrative action. The supporting objectives will help to define the course of action the City will take in implementing these goals and will provide a basis for policy decisions.

GOAL 1

Maximize opportunities for the development and continued revitalization of a balanced community.

Objective 1.1

Provide for a safe, stable and pleasant living environment for existing and future City residents.

Policies

- 1.1.1 All existing municipals parks will be preserved.
- 1.1.2 Encourage land assembly for proposed residential projects encompassing contiguous parcels under separate ownerships.
- 1.1.3 Establish program utilizing the resources of the Hawaiian Gardens Redevelopment Agency to maximize residential redevelopment activities in neighborhoods where concentration of substandard housing conditions currently exist.
- 1.1.4 Prepare a program for the Redevelopment Agency outlining potential funding sources and incentives to encourage the recycling of substandard and blighted residential areas.

Objective 1.2

Provide opportunities for new housing for a variety of income groups at varying densities.

Policies

- 1.2.1 Encourage the development of single-family owner-occupied houses within the City to increase community stability.
- 1.2.2 Utilize the resources of the Redevelopment Agency to provide economic incentives and encourage the development and recycling of substandard housing.

- 1.2.3 Manage residential growth in a manner that does not exceed the ability of the City, special districts and utilities to provide needed facilities and services.
- 1.2.4 Require new development to pay the costs of public facilities and services needed to serve those developments.
- 1.2.5 Accommodate new residential development in accordance with the General Plan Map.
- 1.2.6 Establish zoning regulations which encourage developers to design residential projects which maintain the scale and rhythm of the lot divisions and building siting or use other design and planning solutions which establish and maintain a distinctive character and environment for existing residential neighborhoods.
- 1.2.7 Encourage developers to construct housing in areas designated for medium and higher densities which incorporates courtyard units and meets the following requirements:
 - a. Inclusion of clearly defined courtyard space, U, L or O shaped. There must be a distinct outdoor communal space (or series of space) which serves as a focus for the housing units or individual units to the living units from the space;
 - b. Development of all housing units as "through" units. This means that all units must have an exposure off the courtyard, as well as an exposure on at least one other side;
 - c. Inclusion and detailing of people-friendly elements, such as balconies, bay windows, stoops, recessed windows, porches, and arcades;
 - d. Design of the courtyard space with a distinctive character created through special landscape elements such as fountains, landscaping, reflective pools, towers, decorative tile, special entry stairs to second level units;
 - e. Exclusion of interior corridors. All units must be entered directly from the courtyard space, even if two or three units may share a common entry stairs from the courtyard; and
 - f. Minimization of the parking entry and design to be architecturally sensitive to and treated as an integral part of the street facade.

Objective 1.3

Enhance the economic vitality of the community by providing for the preservation and enhancement of the existing commercial uses and the creation of new commercial development, within the City.

Policies

- 1.3.1 Provide continued incentives for the upgrading of the City's commercial buildings and properties through the commercial rehabilitation programs.
- 1.3.2 Encourage the consolidation and development of quality commercial projects.
- 1.3.3 Encourage the development of existing vacant and underutilized parcels within the City.
- 1.3.4 Encourage the redevelopment of underutilized and blighted commercial areas along Norwalk Boulevard, utilizing economic and redevelopment incentives.

Objective 1.4

Preserve and expand employment opportunities by protecting the City's industrial areas from land use conflicts.

Policies

- 1.4.1 Insure that future industrial development or the reuse of existing industrial facilities are designed as to not impact adjoining uses.
- 1.4.2 Restrict industrial buildings and uses to industrially zoned properties only.

Objective 1.5

Provide for a pattern, scale, and design of land uses which promote individual safety and pleasure.

Policies

- 1.5.1 All existing municipal parks will be preserved.
- 1.5.2 Open space, recreation and cultural facilities shall, to the extent feasible, be provided to meet population growth and residential density increases.
- 1.5.3 Encourage developers to achieve a high level of architectural design for all residential development.
- 1.5.4 Require that land uses provide lighting, screening, and other elements pertinent to the type of use which provide safety to users of the site and ensure no adverse impacts on adjacent properties.
- 1.5.5 Require that entertainment, drinking establishments, and other uses characterized by high activity levels provide adequate safety measures to prevent "spill-over" impacts on adjacent properties.

- 1.5.6 Require that all uses and buildings enhance pedestrian activity along Carson Street and Norwalk Boulevard in accordance with the land use urban design policies and standards specified.

Objective 1.6

Maintain and enhance existing local-serving and specialized commercial areas.

Policies

- 1.6.1 Establish standards and regulations which ensure that adequate local-serving commercial uses are retained throughout the City's commercial districts and are easily accessible to residents.
- 1.6.2 Encourage the retention of all existing full service supermarkets and, if removed, encourage an economically-viable replacement within a five-minute walk of the former location.
- 1.6.3 Encourage neighborhood commercial uses in local neighborhoods to make goods and services available within walking distance for all residents.
- 1.6.4 Require that new large scale planned use development projects incorporate local-serving commercial services and uses, unless inappropriate due to the unique use or location of the site.
- 1.6.5 Whenever commercial development is proposed to be located next to existing residential areas, the commercial development shall bear the burden for mitigating any potential disturbance through the provision of landscaping, design, setbacks, walls, and other measures.
- 1.6.6 Accommodate a diversity of local-serving commercial uses on the ground floor of buildings, including retail, office, food sales and service, general merchandise, home improvement, gardening, financial services, and personal services.

GOAL 2

Retain the strong single family home urban environment for which Hawaiian Gardens is known.

Objective 2.1

Provide for the retention and maintenance of existing residential neighborhoods which are primarily developed with single-family houses and duplexes and ensure that new development is compatible with and complements, in scale and architecture, existing structures where a distinctive neighborhood character exists.

Policies

- 2.1.1 Require that areas characterized by the presence of single-family detached units be restricted to one unit per lot in areas designated A-1 and R-1.
- 2.1.2 Require that existing low and medium density neighborhoods that predominantly contain single-family detached and duplex units, be preserved at their prevailing densities.
- 2.1.3 Require that new residential development be compatible with and complement existing structures, including the following:
 - a. Maintenance of the predominant or average existing front yard setbacks;
 - b. Use of site landscape to complement the architectural design of the structure; and
 - c. Limitation of front yard paving for driveways, if possible.
- 2.1.4 Preserve quality low and medium density residential neighborhoods and limit encroachment by other land use to those which primarily serve the local neighborhood.
- 2.1.5 Ensure that linear commercial development does not expand into existing residential corridors.

Objective 2.2

Provide for new land development which is reflective of and complements the overall pattern and character of existing uses, infills vacant and underutilized parcels, offers opportunities for the intensification of key "targeted" sites, and mitigates any adverse impacts.

Policies

- 2.2.1 Periodically monitor the conditions of buildings in the City and enforce pertinent building and zoning codes where necessary.
- 2.2.2 Provide programs which educate residential and commercial property owners and tenants on methods of property maintenance and upkeep.
- 2.2.3 Continue to utilize redevelopment techniques authorized by California Redevelopment Law and other methods, for the improvement of commercial and/or residential areas characterized by physical, economic, and/or social blight.
- 2.2.4 Encourage the assembly of selected small parcels into larger development sites to facilitate the revitalization of deteriorated or blighted areas, where such action is needed and the objective is to achieve the effective economic and physical improvement of the area.

- 2.2.5 Provide for the use of a City agency, nonprofit corporation, or other entity to attract new development and to facilitate the revitalization of deteriorated areas.
- 2.2.6 Provide economic assistance and administer educational programs for the improvement of physically deteriorated and blighted structures.

Objective 2.3

Provide for the retention and maintenance of the existing scale of multi-family neighborhoods which are characterized predominantly by one- and two-story structures, and ensure that new development is compatible with and improves the scale and architecture of existing structures, for the purpose of creating distinctive neighborhood characteristics.

Policies

- 2.3.1 Require that existing multi-family neighborhoods characterized by low-rise, one- or two-story structures be preserved at the prevailing scale, allowing development which meets the specified standards.
- 2.3.2 Require that new residential development be compatible with and complement existing structures, including the:
 - a. Maintenance of the predominant or average existing front yard setbacks, except for balconies or building extensions to achieve additional common courtyard area;
 - b. Use of site landscape to complement the architectural design of the structure;
 - c. Limitation of front yard paving for driveways with a maximum width of 24 feet or 40 percent of the property frontage, whichever is less;
 - d. Incorporation of a minimum of 60 percent of the required common open space at grade or the level of the first habitable floor;
 - e. Design of common space so that it is easily accessible and of sufficient size to be usable by residents; and
 - f. Inclusion of entries which convey a sense of individual identity for each residential unit at the lowest habitable level facing a public street or courtyard.
- 2.3.3 Encourage that multi-unit residential structures incorporate architectural design details and elements which provide visual character and interest. Avoid flat planar walls and "box-like" appearances through the use of courtyards, balconies, offset planes and levels, deeply recessed or projecting windows, sloping roofs, and landscaped yards.

GOAL 3

Encourage a greater proportion of home ownership and owner occupancy of single and multi-family developments.

Objective 3.1

Provide for the development of housing for low and moderate income households and senior citizens which is compatible with and complements adjacent uses, and is located in close proximity to public and commercial services.

Policies

- 3.1.1 Adequate residential land shall be provided, at appropriate densities to allow for and encourage the desired homeowner population growth.

GOAL 4

Encourage new offices and retail growth in the City.

Objective 4.1

Preserve the predominant low-rise, small to moderate scale of the City's commercial corridors.

Policies

- 4.1.1 Allow new commercial and planned use development in accordance with the prescribed floor area ratio and height limits.
- 4.1.2 Encourage and establish practical incentives for the adaptive reuse of existing low-rise, small-scale buildings in the City, which may include the subsidization of low interest loans, financial grants, reduction of permit fees and exactions, reduction of onsite parking requirements when parking can be provided in a nearby shared-facility in accordance with an area parking plan, or other pertinent methods.
- 4.1.3 Promote commercial centers and discourage, where possible, strip commercial developments.

Objective 4.2

Provide for the continuation and expansion of existing commercial uses which serve the needs of the City's residents, and are the principal economic strengths of the City.

Policies

- 4.2.1 Allow for and encourage the development of uses which provide for the social and health needs of the residents, including day care centers for children, seniors, physically impaired, social service providers, and medical facilities, provided that they are compatible with adjacent land uses.

- 4.2.2 Establish regulations and standards which allow for the development of hotels, restaurants, nightclub/entertainment and other visitor-serving uses.
- 4.2.3 Establish regulations and standards which allow for the development of specialty clothing merchandise activities, and other specialty commercial uses identified in the Economic Element.

Objective 4.3

Provide for the upgrading, infill, recycling, and new development of uses along Carson Street and Norwalk Boulevard to create a uniform and consistent pattern of development and uses which serve adjacent residences.

Policies

- 4.3.1 Accommodate a full diversity of commercial uses, including retail, office, food sales and service, general merchandise, apparel and accessories, dry goods, furniture, home improvement, gardening, financial services, and personal services, and cultural uses.
- 4.3.2 Allow for the intermixing of commercial uses and housing on sites where abutting commercial and residentially-designated parcels have been combined into a joint development parcel.
- 4.3.3 Allow the consolidation of abutting residential parcels and commercial parcels into unified planned use development projects, provided that:
 - a. Only residential parcels classified as medium and high density may be included with the commercial parcels;
 - b. The total yield of development does not exceed that permitted by the underlying land use classifications;
 - c. At least 50 percent of the maximum allowable residential density is developed onsite, and in lieu fees or other contributions are provided by the developer to offset the loss and compensate for the difference between the number of residential units developed on the site the maximum number which could be developed as allowed by the zoning designation. In no case shall the development of 100 percent of the residential density potential be precluded;
 - d. No residential uses are located along the ground floor of the commercial frontage;
 - e. Only residential uses are developed along the residential street frontage;
 - f. A specific plan is prepared and approved that demonstrates that the project:
 - (1) Is compatible with and complements adjacent use;

- (2) Maintains the scale and character of existing development;
 - (3) Maintains or increases the existing number of residential units and those for low- and moderate-income households and seniors; and
 - (4) Adequately mitigates traffic, noise, light and glare, and other environmental impacts; and
- g. The project does not decrease, but should increase the supply of neighborhood-serving commercial use.
- 4.3.4 Encourage and accommodate the development of commercial uses which provide for the day-to-day service needs of nearby residents and employees.
 - 4.3.5 Encourage and accommodate the development of specialty commercial (boutiques, gift shops, etc.), entertainment, restaurant, and similar uses.
 - 4.3.6 Accommodate professional offices on the second level or higher of buildings.
 - 4.3.7 Accommodate housing units on the second level or higher or to the rear of buildings provided that the residential and commercial spaces are fully separated, the impacts of noise, odor, and other adverse characteristics of commercial activity can be adequately mitigated, and a healthy, safe, and well designed environment is achieved for the residential unit(s).
 - 4.3.8 Allow for the continuation of existing and development of new public streets, parking facilities, utilities, storm drainage, and other infrastructure in locations which serve and are integrated with the City's land uses.
 - 4.3.9 Require that all uses and buildings enhance pedestrian activity along Carson Street and Norwalk Boulevard, in accordance with the land use and urban design policies and standards.

GOAL 5

Retain existing industry in Hawaiian Gardens and attract new industry, as the Land Use pattern permits, which provides jobs and high value products.

Objective 5.1

Provide for the continuation of existing and development of new manufacturing uses which support the City's principal commercial uses, and provide employment to residents.

Policies

- 5.1.1 Establish regulations and standards which allow for the development of small scale manufacturing uses.

- 5.1.2 Prohibit the development of manufacturing uses which operate in a manner, or use materials, which may impose a danger on adjacent uses or are harmful to the environment.
- 5.1.3 Encourage the development of a pattern of land uses that establishes an economic base which provides jobs, to the extent feasible, for those who choose to both live and work in Hawaiian Gardens.

Objective 5.2

Ensure that unique uses, or uses characterized by high occupancy or intensity of activity, be sited, designed, and managed to mitigate impacts on adjacent uses.

Policies

- 5.2.1 Mitigate the impacts, by limiting the number, controlling the locations or using other restrictions on the development of commercial uses whose activities could adversely impact adjacent residences, schools, or other uses. Examples of commercial uses which may have adverse impacts are alcohol sales, gasoline stations, automobile/truck repair and parts, 24-hour markets, fast food establishments, entertainment, video arcades, restaurants and bars, and adult businesses.
- 5.2.2 Require the following mitigation measures for high occupancy, high intensity activity, and unique commercial uses:
 - a. Limitation of ambient noise generated by the site on adjacent uses;
 - b. Enclosure of all visually unattractive facilities and equipment;
 - c. Limitation of frequency of location so that the cumulative presence of such uses does not result in physical or economic blight or adversely impact adjacent residential uses;
 - d. Provision of adequate parking;
 - e. Locating site access so that it does not adversely impact adjacent uses;
 - f. Use of architectural design styles, massing, and scale which is consistent with and complements adjacent uses;
 - g. Incorporation of landscaping to create a visually-pleasing appearance;
 - h. Incorporation of lighting on the building to emphasize architectural details, materials, surface treatments, and/or colors, and avoidance of excessively bright, or glaring illumination;
 - i. Use of site lighting which minimizes spill-over onto adjacent residential properties; and
 - j. Possible limitation on hours of operation.

Objective 5.3

Balance residential, commercial, industrial, open space and recreational land uses to provide diverse economic, social and cultural opportunities.

Policies

- 5.3.1 Provide adequate buffering to minimize potential adverse conflicts between different land uses.
- 5.3.2 Facilitate the integration of regionally beneficial land uses, such as transportation corridors, flood control systems, utility corridors, and recreational corridors.
- 5.3.3 Allow for the continuation of public recreation, libraries, education, institution (governmental, sheriff, fire, etc.), and religious uses at their present locations, and development of new uses where they complement and are compatible with abutting land uses.
- 5.3.4 Separate existing industrial activities from conflicting land uses.
- 5.3.5 Where potentially conflicting land uses or land use intensities meet, they shall, wherever practical, meet along rear lot lines, alleys or across arterial or local collector streets. Where residential land meets industrial land, they shall meet, where possible, across a street or alley, rather than a rear lot line.

GOAL 6

Improve the appearance of Hawaiian Gardens' public and semi-public rights-of-way.

Objective 6.1

Ensure that signage incorporated on privately-owned structures and sites is visually attractive and provides a high quality image for the City.

Policies

- 6.1.1 Establish guidelines and require design review of replacement billboards to ensure that they are well-integrated with their setting.
- 6.1.2 Require that billboards be physically and visually maintained, consistent with the requirements of State legislation.
- 6.1.3 Encourage the re-siting of existing billboards so that they are not in close proximity to one another.
- 6.1.4 Encourage the continued use of distinctive and well designed billboards on Carson Street and Norwalk Boulevard.
- 6.1.5 Initiate a program to acquire and remove billboards, with the first priority for areas in which they adversely blight the adjacent area.

- 6.1.6 Require that replacement billboards be sited so that they do not adversely impact viewsheds or adjacent residences.
- 6.1.7 Require that signage on commercial structures be compatible and integrated with their architectural design.
- 6.1.8 Encourage the use of creative and well-designed signs which establish a distinctive image for the City.
- 6.1.9 Limit signage to that necessary to identify the business, including the name, type of business, and address.
- 6.1.10 Restrict signage used on buildings for advertising purposes to temporary window signs which occupy no more than twenty-five (25) percent of the total window area.
- 6.1.11 Encourage that signs be designed and placed on buildings to be visible to pedestrians.
- 6.1.12 Require that all structures in the City have an address sign which is clearly visible from the air, where practical, and the street.
- 6.1.13 Prohibit the use of signs in residential neighborhoods, except those necessary for the sales and rental of property, public information, or short-term political campaigns.
- 6.1.14 Allow for modifications of sign requirements to accommodate unique and distinctive signage.

Objective 6.2

Ensure that new development provides for amenities which contribute to a high quality of life and image for residents, business persons, and visitors to the City.

Policies

- 6.2.1 Require that all new development provides open space landscape which contributes to enhancement of the visual image of Hawaiian Gardens.
- 6.2.2 Require that commercial uses incorporate landscape along their street frontages (which is designed to enhance pedestrian activity and includes trees and shrubs) which provide vertical height and mass.
- 6.2.3 Require that all surface parking lots incorporate landscaping along their perimeter and in their interior.
- 6.2.4 Require that residential developments incorporate landscape that complements the existing landscape where a high sense of neighborhood quality exists and improves on it where it is deficient.

Objective 6.3

Provide for adequate physical and visual buffers between land uses characterized by differing functions, intensity, and/or density to ensure their compatibility and avoid conflicts.

Policies

- 6.3.1 Require that parcels developed for commercial uses incorporate buffers with abutting residential parcels which adequately protect the residential parcel from the impacts of noise, light, visibility of and from commercial activity, vehicular traffic, and risks to property.
- 6.3.2 Require that buffers between commercial planned use and residential parcels be developed to a minimum width of fifteen (15) feet, or greater if necessary to adequately protect adjacent residences, which shall incorporate decorative walls and landscape including trees, and be adequately secured.
- 6.3.3 Require that the vertical elevation of commercial and planned use structure abutting residential parcels be set back in accordance with the pertinent policies and standards, where they are prescribed.
- 6.3.4 Require that any commercial use characterized by high levels of activity and noise (e.g., entertainment uses and dance clubs) contain the noise impacts onsite.
- 6.3.5 Require that air conditioning and other mechanical equipment located on the rooftop of a structure be enclosed to improve visual quality, and be designed to be architecturally integrated with the building.
- 6.3.6 Require that onsite lighting for all land uses be unobtrusive and constructed or located so that only the intended area is illuminated, offsite glare is minimized, and adequate safety is provided.
- 6.3.7 Require that all commercial and planned use building facades facing residential parcels be designed to continue the architectural character established for the street facing elevations and be aesthetically pleasing.

Objective 6.4

Promote a high quality pedestrian environment throughout residential neighborhoods and as linkages to commercial districts and recreational uses.

Policies

- 6.4.1 Require new residential structures to be set back at distances consistent with existing buildings except where encroachment is necessary to achieve the development of additional courtyard units, and that such setbacks be adequately landscaped and maintained.
- 6.4.2 Require that residential uses provide direct and convenient access to abutting sidewalks.

- 6.4.3 Require the installation and maintenance of street trees in accordance with a Street Tree Plan.

GOAL 7

Provide a scheme for the physical form, scale, and design of development, and accommodate uses which induce and enhance the social use and pedestrian activity along Hawaiian Gardens' commercial streets.

Objective 7.1

Continue coordinated efforts to revitalize Norwalk Boulevard.

Policies

- 7.1.1 Provide for enhanced pedestrian activity along commercial and planned use street frontages by the following:
- a. Require that building frontages be located in close proximity to sidewalks, except for i) setbacks to accommodate outdoor dining and plazas, provided that such setbacks do not exceed a depth of one-third of the lot depth, or 60 feet, whichever is smaller; and ii) internal courtyards, plazas, and walkways which may be located on any portion of the site;
 - b. Allow for the development of commercial store fronts and open spaces below the sidewalk grade, provided that pedestrian activity is not adversely impacted;
 - c. Require that the ground floor elevation of a building facing the sidewalk must be visually and physically penetrable, incorporate architectural elements to provide visual interest and relief from flat surfaces (e.g., textured materials, offset planes, differentiated piers and columns, recessed entries and windows, and awnings), and compatibly landscaped;
 - d. Restrict the types of uses which are located within the ground floor of a structure facing a sidewalk to those which are "pedestrian-friendly" (such as high customer turnover uses: restaurants, clothing stores, food stores, health clubs, personal services, and community service organizations) for a minimum of 70 percent of any block of the first 50 feet of building depth; and
 - e. Allow variations from these standards when existing structures are recycled for differing tenants or uses, or when such standards are infeasible or cannot be reasonably achieved.
- 7.1.2 Require that public open spaces, plazas and outdoor commercial uses be well maintained and kept free of debris.

- 7.1.3 Encourage the use of awnings (constructed of durable, fade-resistant, and easily maintainable materials), overhangs, porticoes, trellises, and other design elements which provide protection to pedestrians and require that they be located at a height to provide sufficient room for pedestrians.
- 7.1.4 Require that a minimum of 50 percent of the first occupiable floor of the street frontage of a structure be located within two feet at any point of the sidewalk elevation at the abutting property line.
- 7.1.5 Encourage the development of landscaped open space setbacks and plazas between the sidewalk and commercial building at the approximate elevation of the abutting sidewalk.

7.0 LAND USE MAP AND CLASSIFICATIONS

7.1 Land Use Map

The City of Hawaiian Gardens Land Use Map (Figure 2) has been developed to further the goals and policies of the General Plan. As can be ascertained from the map, the majority of the land use designations are consistent with the existing development within the City. The map does provide for land use amendments from the previously prepared Land Use Map. The specific changes are detailed in Section 7.4.

7.2 Land Use Classifications

Classifications, as depicted on the proposed Land Use Map of the General Plan, are described in the following sub-sections. It should be noted that the descriptions are intended to be general in nature, and the precise permitted land uses and requisite standards and procedures are further defined in the City's Zoning Ordinance.

7.2.1 Residential Designations

7.2.1.1 Low Density

The low density land use category is characterized as single family residential areas. The permitted density within this zone ranges from 1 to 8.4 dwelling units per acre. These areas are primarily located in areas close to school and park facilities.

7.2.1.2 Medium Density

The medium density residential land use category is characterized by multi-family residential uses, including single-family duplex and other medium-density developments. Densities permitted within the medium density zone range from 8.5 to 17 dwelling units per net acre. The designation is intended for areas where the existing subdivision patterns can accommodate multiple family development.

7.2.1.3 Intermediate Density

The intermediate density residential land use category is characterized by multi-family residential uses, including townhomes, condominiums, and other multi-family projects. Densities permitted within the intermediate density zone allow up to 19 dwelling units per net acre. A density bonus increase of up to 24 units per acre may be permitted provided the developer agrees to dedicate 20% of the units in a proposed project to low (80% of median income) and very low (50% of median income) income families. Projects which include the density bonus provision are required to be reviewed and approved by the City Council prior to the issuance of building permits.






7.2.1.4 High Density

High density residential areas are intended for multiple family developments including townhomes, apartments and condominiums. Densities permitted within the high density category range from 17.1 to 24 dwelling units per net acre. These areas should be located in close proximity to public and commercial facilities in areas where the existing lot configurations are adequate to accommodate a high level of multiple family development.

CITY OF HAWAIIAN GARDENS









GENERAL PLAN UPDATE


GENERAL PLAN LAND USE MAP

RESIDENTIAL	MAX DENSITY
	LOW DENSITY 8.4 DU/ACRE
	MEDIUM DENSITY 17.0 DU/ACRE
	INTERMEDIATE DENSITY 19.0 DU/ACRE
	HIGH DENSITY 24.0 DU/ACRE
	MOBILE HOMES

COMMERCIAL	
	GENERAL COMMERCIAL

INDUSTRIAL	
	LIGHT INDUSTRIAL

PUBLIC/QUASI - PUBLIC	
	CIVIC CENTER
	FIRE STATION
	PARK
	HOSPITAL
	POST OFFICE
	ELEMENTARY SCHOOL
	JUNIOR HIGH SCHOOL
	CHURCH

	PARK/FIRE STATION
	PARK

	SPECIFIC PLAN AREA
---	--------------------

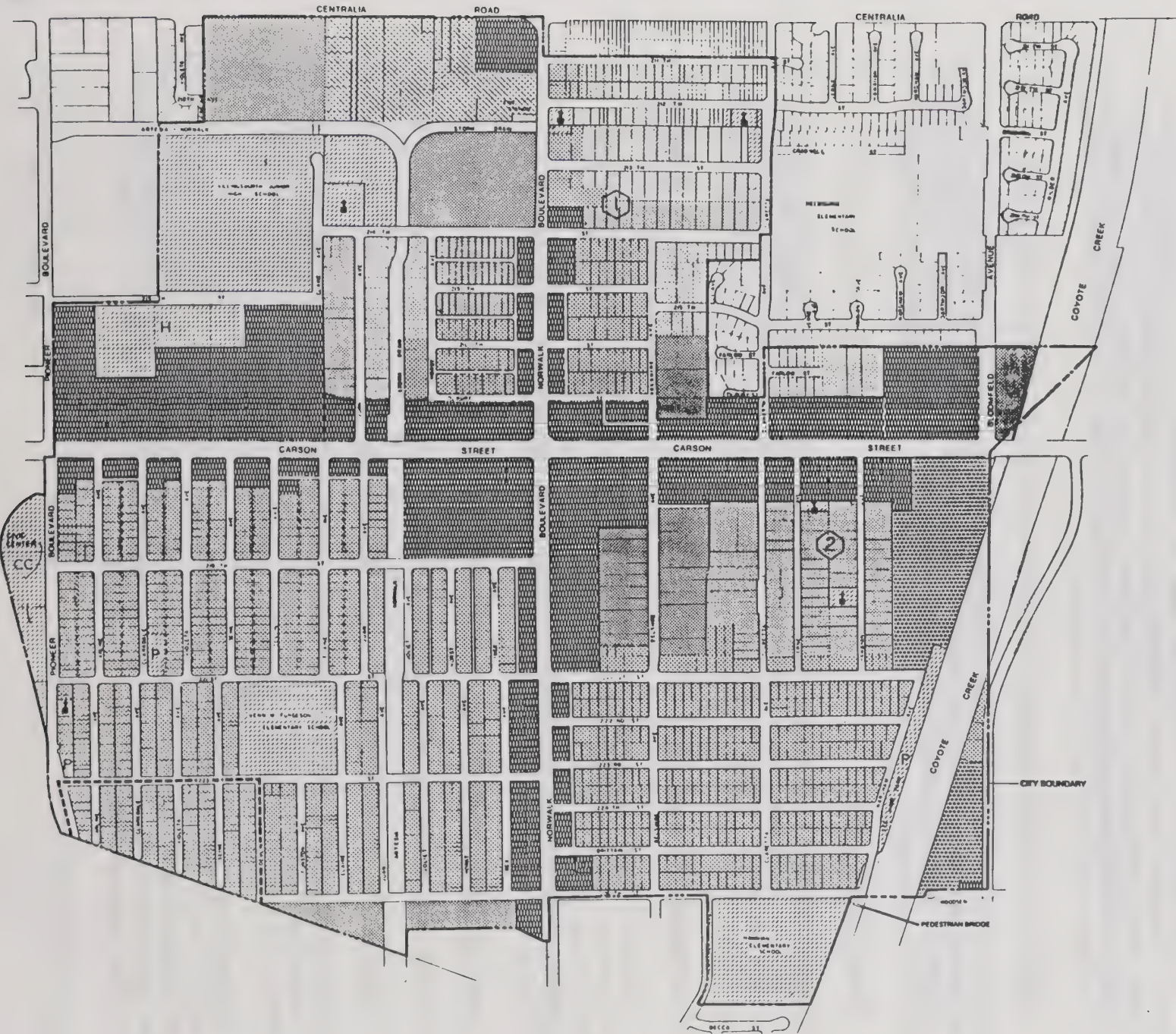
ADOPTED _____ AMENDED _____



LOCKMAN &
ASSOCIATES

2

FIGURE



7.2.1.5 Mobile Home Park

The mobile home park zone designates areas for medium-density mobile home living areas. Uses are limited to mobile home parks with spaces available for rent, accessory uses, and recreational vehicle parks. The maximum density allowed in this zone is one dwelling unit for each 2,000 square feet of land, not to exceed twenty-one (21) dwelling units per net acre.

7.2.2 General Commercial Designations

The General Commercial designation allows for a broad range of commercial services including retail sales, repair services and entertainment uses and community service organizations. The Commercial designation also includes administrative and professional offices for uses such as medical and dental professionals, lawyers, engineers, planners or architects, and other similar services. Medical clinics, banks, savings and loan organizations, real estate and insurance brokers, and utility offices are also included in this classification.

7.2.3 Light Industrial Designations

This land use category designates areas for small and medium sized industrial uses which are not likely to have adverse effects upon each other or upon neighboring commercial and residential uses. Adequate enclosure and screening of uses is required, and adequate landscape screening on arterial streets is encouraged.

7.2.4 Specific Plan Area

This designation applies to the residential area south of 223rd Street, between Pioneer Boulevard and Devlin Avenue. Designation as a Specific Plan Area will establish development standards and provide opportunities for renovation and rehabilitation of the areas. Further discussion is contained in Section 8.3 of the Land Use Element.

7.3 Quality Development

The City desires to permit high quality development and to permit higher density projects only when they provide adequate parking, open space, landscaping and amenities. To implement this overall concept and the goals of the Land Use Element, the City will review and revise the Zoning Code regarding minimum lot sizes, setbacks, parking requirements, open space, landscaping, reciprocal access and remodeling.

7.4 Land Use Map Changes

Specific changes proposed for the Hawaiian Gardens Land Use Map are as follows:

7.4.1 Farlow Street, East of Claretta

Extend Farlow Street easterly, approximately 365 feet. Properties located on the north and south sides of Farlow Street will be designated Low Density Residential. The properties fronting on Carson Street north to 270 feet will be designated for commercial use.

7.4.2 Carson Street, West of Norwalk Boulevard

Properties located on the south side of Carson Street, north of the alley, will be designated for commercial use, excepting the existing encroaching uses. South of the alley, to 219th Street, the properties will be designated Medium Density Residential.

7.4.3 West Side of Norwalk Boulevard, East of Ibex Avenue

This area, between 219th and 221st Streets, is divided north to south by an alley. Properties east of the alley (to Norwalk Boulevard) will be designated General Commercial, and properties west of the alley (to Ibex Avenue) will be designated Medium Density Residential.

7.4.4 East Side of Norwalk Boulevard, Between 221st and Brittain Street

Commercial use will be designated for properties located on Norwalk Boulevard, extending east to the alley. Properties easterly of the alley will be designated Medium Density Residential.

7.4.5 Claretta Avenue Extension

Claretta Avenue will be extended south from Carson Street, providing through access to 221st Street.

7.4.6 Carson Street, East of Belshire Avenue to City Boundary

The existing Light Industrial designation will be eliminated, and General Commercial use will be designated for the properties located on the south side of Carson Street, extending approximately 300 feet southerly. South of this area, extending to 221st Street, the land use will be designated Intermediate Density Residential.

7.4.7 Belshire Avenue Parcel

The parcel of property on the west side of Belshire Avenue, located approximately 420 feet south of Carson Street, will be changed from Light Industrial to High Density Residential.

7.4.8 Verne Avenue/Hawaiian Avenue Park

A park will be located in the area generally described as south of Carson Street, east of Verne Avenue, west of Hawaiian Avenue, and north of 221st Street.

7.4.9 Southwest Corner of Norwalk Boulevard at 226th Street

The Low Density Residential designation of the existing General Plan conflicts with the existing land use and zoning designations, and will be modified to General Commercial use.

7.4.10 East Side of Norwalk Boulevard (East of Alley), North of Tilbury Street

Existing General Commercial area will be designated for Medium Density Residential use.

7.4.11 Juan Avenue, between Carson Street and 214th Street

The east side of Juan Avenue, between Carson Street and 214th Street, will be designated for Low Density Residential uses.

7.4.12 Horst Avenue, between Tilbury Street and 216th Street

The west side of Horst Avenue, from 214th Street south, approximately 600 feet, will be designated Low Density Residential. The remaining properties south to Tilbury Street will be designated Medium Density Residential.

7.4.13 Residential Uses, 214th Street to Tilbury Street, between Norwalk Boulevard and Belshire Avenue

The existing Intermediate Density Residential designations will be changed to provide a uniform Medium Density Residential designation.

7.4.14 Northeast Corner of Elaine Avenue and 214th Street

The existing General Plan designation of Intermediate Density Residential will be changed to Medium Density Residential.

7.4.15 Southeast Corner of Centralia Road and Norwalk Boulevard

The existing Public/Quasi-Public land use designation for this site (Post Office) will be changed to General Commercial.

7.4.16 Church Properties

The following existing church properties located in residential areas are to be re-designated to Public/Quasi-Public (Church) land uses:

- a. Pioneer Boulevard between 221st and 223rd Streets
- b. Norwalk Boulevard at 212th Street
- c. Claretta Avenue at 212th Street
- d. 214th Street at Elaine Avenue
- e. Verne Avenue south of Carson Street
- f. Hawaiian Avenue north of 221st Street

7.4.17 Claretta, Verne, and Hawaiian Avenues between 221st Street and Carson Street

Re-designate properties fronting on both sides of Claretta Avenue, Verne Avenue and Hawaiian Avenue between 221st Street and Carson Street from High Density Residential to Intermediate Density Residential land uses.

7.4.18 215th Street and 214th Street between Horst Avenue and Norwalk Boulevard

Re-designate properties on both sides of 215th Street and on the south side of 214th Street between Horst Avenue and Norwalk Boulevard from High Density Residential to Intermediate Density Residential land uses.

7.4.19 214th Street between Norwalk Boulevard and Claretta Avenue

Re-designate properties on the north side of 214th Street between Norwalk Boulevard and Claretta Avenue from High Density Residential to Intermediate Density Residential land uses.

7.4.20 North Side of 221st Street

Re-designate properties located on the north side of 221st Street east of Hawaiian Avenue to 300 feet west of Belshire from High Density Residential to Medium Density Residential land uses.

7.4.21 A-1 Zone

The existing A-1 zone area will be rezoned to R-1-10,000. The minimum required lot size in this zone will be 10,000 square feet.

8.0 IMPLEMENTATION PROGRAMS

8.1 Development Regulations and Enforcement Programs

The program under which this General Plan Update was undertaken did not include a comprehensive update of Hawaiian Gardens' development regulations. These regulations include the Zoning Ordinance, the Subdivision Ordinance, development and site plan review procedures and standards. It may be necessary to revise and update some of these documents to reflect the land use policies and standards contained in this General Plan Update.

8.1.1 Changes to Zoning Ordinance

The Zoning Ordinance of the City Code provides for the designation of zoning districts and the regulation of development within those districts. Typical development controls include the type of use allowed, density, open space, height, bulk, landscape and setback requirements and numerous other development standards. Procedural techniques for the review and regulation of the development are as numerous as the requirements and standards. Those activities are administered by the Planning Commission and City Council.

The following lists the possible changes to the City of Hawaiian Gardens' Zoning Ordinance. The specific revisions will be the task of those who will rewrite the ordinance.

1. The zoning map may require revision to reflect the land use policy map;
2. Establish specific, fair, economically feasible, and administratively enforceable measures to require that the impacts of new commercial development on the City's housing, public open space and child care facilities are mitigated. Incentive zoning, exactions and other appropriate zoning techniques may be considered. Where applicable, these standards and measures should be established to comply with all legal requirements;
3. Establish zoning regulations that promote new construction on assembled properties with provisions for adequate access, parking, setbacks, landscaping and related amenities.

8.1.2 Subdivision Ordinance Update

Subdivision regulation is an exercise of the police power of a City authorized by the State to control the manner in which land is divided. Like the Zoning Ordinance, it must be consistent with the General Plan. It will be necessary to review the City's Subdivision Ordinance and amend it, if necessary, to reflect the land use and urban design goals, objective, policies, and standards. As the policy does not provide for differing parcelization in the City, it is unlikely that any revisions will be necessary.

8.1.3 Code and Ordinance Enforcement

Codes and Ordinances of the City of Hawaiian Gardens which implement the Land Use Element shall be enforced. Historically, this has been achieved by City staff responses to specific complaints. If a problem has been found on investigation, a demand for compliance has been issued. It is suggested that additional resources and personnel be allocated to periodic surveys of land use and building condition and, where problems are found, code compliance be required.

8.2 Adverse Impact Mitigation Programs

8.2.1 Interjurisdictional Coordination

Land use developments in Hawaiian Gardens impact the Cities of Lakewood, Long Beach, and Cypress. Similarly, development in those communities will affect Hawaiian Gardens. Key concerns include the impacts of traffic generated by new development in one city on streets crossing city boundaries and physical effects of the height and mass of buildings located on a city's periphery on uses in the adjacent jurisdiction. Thus, it is essential that cities jointly address common issues. This should include the opportunity for mutual review and discussion of mitigation measures for projects affecting more than one jurisdiction. An agreement should be established between these Cities to facilitate such review and input.

8.2.2 Development Agreements

Development agreements are authorized by State law to enable a city to enter into a binding contract with a developer which assures the city as to type, character, and quality of development and additional benefits which may be contributed and assures the developer that the necessary development permits will be issued regardless of changes in regulations.

This ensures that a developer of a multi-phased projects, who has based his or her project financing on conditions negotiated with the City at a particular time, would not be adversely affected by subsequent, more restrictive regulations. This, in turn, enables the City to extract additional contributions and benefits from the developer. This is a technique which may be used in lieu of a specific plan and other large development projects not requiring an increase in buildable area or height.

8.2.3 Environmental Review

The California Environment Quality Act (CEQA) requires that the environmental effects of a project must be taken into account when considering zone changes, development permits, specific plans, and development agreement. This involves the review of all projects submitted by an applicant or initiated by the City and determination of their potential for significantly affecting the City's and region's environmental resource (by an "Initial Study"). If it is found that significant impacts may occur, an Environmental Impact Report (EIR) must be prepared.

Environmental review occurs in concert with the development permit process. No permit can be approved without, first, satisfactory completion of the environmental review process. This may involve a full EIR, "Focused" EIR if it is found that only a limited number of resources may be impacted, "Supplemental" EIR if the project is a revision of an earlier project or time has passed and conditions have changed, "Negative Declaration" if the project is determined by the City to have no significant effects, or an Expanded Mitigated Negative Declaration (EMND) where the project is determined to have potential impacts on limited resources, for which analyses and mitigation measures have been separately prepared and which are summarized (annotated) in the EMND and incorporated by reference.

As a component of the environmental review process, or separately, the City shall require the conduct of an analysis defining the traffic impacts and mitigation measures for new development and adaptive reuse projects. A threshold (i.e., number of trips generated) should be established above which such analyses should be required. The analyses will be subject to public review, as an EIR.

8.2.4 Economic Revitalization

Effectuation of land use and urban design policies will necessitate a coordinated program of economic development. This may include the continuation and funding of nonprofit corporations created by the City to develop low and moderate income housing and attract new businesses to the City. It may also include City and/or Redevelopment Agency funded low interest loans and grants for commercial and residential renovation and rehabilitation. These and other economic development strategies are presented in the Economic Element of this General Plan Update.

8.2.5 Community Redevelopment

California, through the Community Redevelopment Law (Health and Safety Code Sections 33000 et seq.) authorizes a city to undertake redevelopment projects to revitalize blighted areas. The Plan adopted for the City, which includes most of the area within the City, provides additional tools to a city to effectuate productive change.

8.3 Areas Proposed for Recycling and/or New Development

In accordance with the goals and policies of the Land Use Element, the following areas have been designated for major land use changes through the implementation of this plan. The specific locations of these areas are shown in Figure 3.

Area No. 1 is a 10.4 acre site located on the south side of Carson Street, east of Norwalk Boulevard. The Redevelopment Agency has already assembled a portion of the site in anticipation of entering into a Disposition and Development Agreement for additional commercial development and rehabilitation of the balance of the property, possibly accommodating two major tenants and a variety of specialty commercial shops.

Area No. 2 is a 17+ acre site generally located at the northeast corner of Pioneer Boulevard and Carson Street and extending easterly along Carson Street. The site contains approximately 18 separate parcels under six separate ownerships. The majority of the area is either vacant, in a declining state or underutilized. The City has in the past and should continue to work with the affected property owners towards the realization of a comprehensive commercial project at this site due to its significance as one of the remaining large underdeveloped areas along the South San Gabriel Freeway corridor. The site does have excellent freeway visibility which lends itself to some type of regional serving commercial activity. The northernmost portion of the site may be suitable for residential uses.

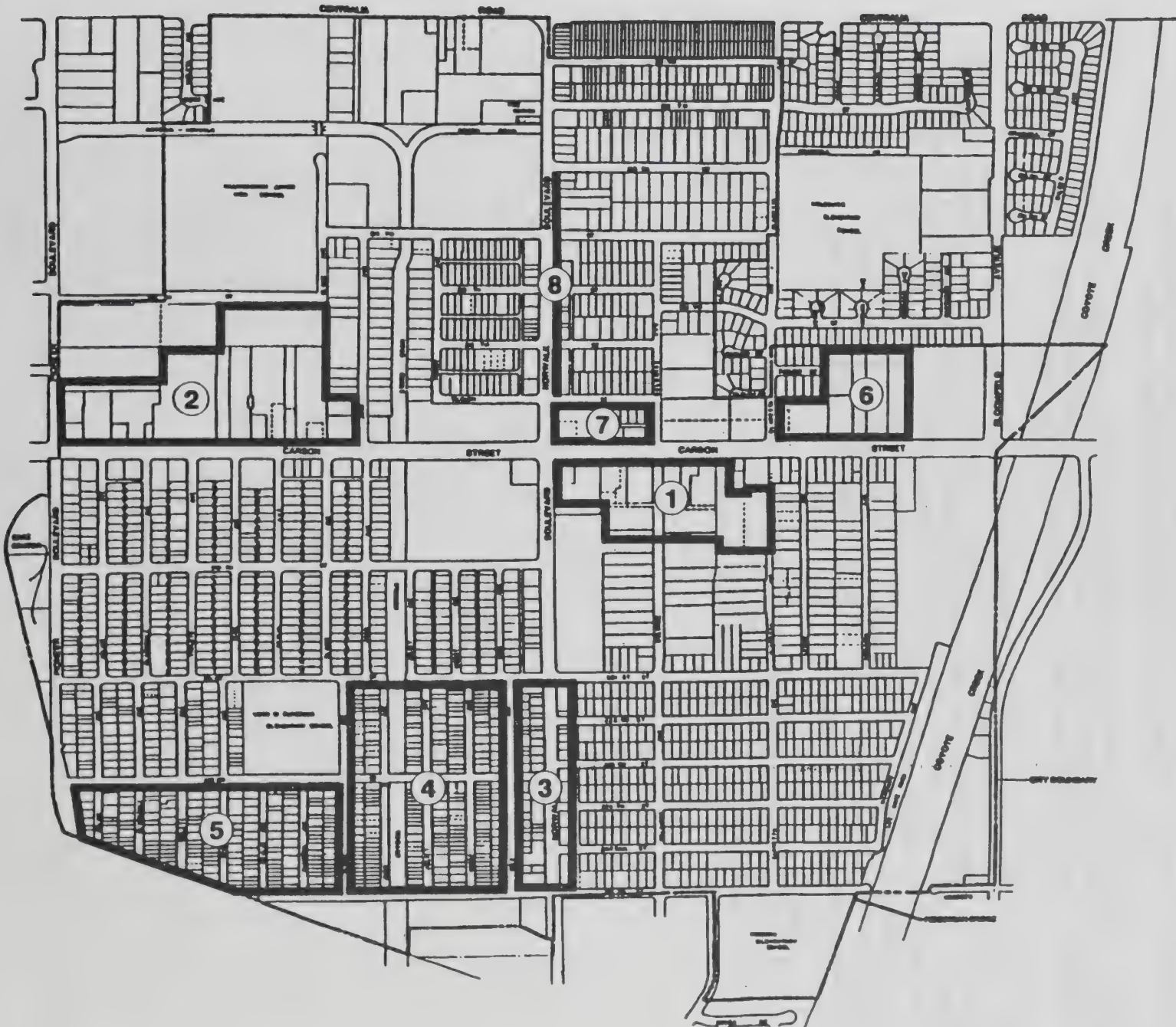
Area No. 3 is a commercially designated corridor generally located along both sides of Norwalk Boulevard, from 221st Street on the north to 226th on the south. This area, covering about 12 acres, includes a large number of nonconforming uses, underutilized and blighted properties. The existing subdivision pattern makes it difficult for private individuals to assemble development areas adequate to support economically viable commercial uses. The Redevelopment Agency will continue to be utilized to encourage the recycling and rehabilitation of this area.

GENERAL PLAN UPDATE - 1992

REFER TO TEXT FOR DESCRIPTION OF
INDIVIDUAL AREAS

3

FRONTLINE



Emphasis shall be placed on commercial development which is compatible with adjoining residential uses; the incorporation of a consistent landscape theme on street frontages and within the public right-of-way; consistent design and signage treatment; the provision of safe and adequate parking areas; and the assembly of small parcels into viable development areas.

Areas No. 4 and 5 - Residential neighborhoods targeted for rehabilitation and recycling. These areas contain a high concentration of substandard housing, blighted conditions, code violations, and are characterized by a subdivision pattern which makes the assemblage of sufficient areas for recycling difficult. Recycling in these areas shall emphasize the elimination of substandard housing conditions, the provision of adequate open space and parking areas, the provision of public improvements, including improved circulation pattern, and incentives to assist in assembling land areas of sufficient to utilize a planned development concept.

Area No. 6 - This area is located at the northeast corner of Carson Street and Claretta Avenue and may be suitable for the development of new single family residential uses. Farlow Street may be suitable for extension eastbound and the development of new homes.

Area No. 7 - Located at the northeast corner of Norwalk Boulevard and Carson Street, south of Tilbury Street and west of Belshire Avenue, this 3.4-acre area contains vacant parcels, mixed commercial, and single-family and multi-family residences. The City is planning to vacate the north/south portion of a public alley located approximately 300 feet east of Norwalk Boulevard. The purpose of the alley vacation would be to improve the development potential of properties located in this block and to also improve access. In addition, this will help to create a uniform and consistent pattern of development, and will also address issues such as access and visibility for existing and future commercial uses.

Area No. 8 - This area includes the commercial businesses fronting on the east side of Norwalk Boulevard, between Tilbury Street and 214th Street. The building facades in this area will be rehabilitated to provide a more appealing and attractive commercial environment.

CITY OF HAWAIIAN GARDENS GENERAL PLAN UPDATE



CIRCULATION ELEMENT

CIRCULATION ELEMENT

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	C-1
1.1 Overview	C-1
2.0 CIRCULATION SYSTEM	C-2
2.1 Streets and Highways	C-2
2.1.1 Existing Network	C-2
2.1.2 Existing Traffic Volumes	C-4
2.1.3 Existing Levels of Service	C-4
2.1.4 Future Traffic	C-13
2.2 Accidents	C-13
2.3 Parking Facilities	C-13
2.4 Public Transit and Paratransit	C-17
2.4.1 Long Beach Transit	C-17
2.4.2 Southern California Rapid Transit District	C-17
2.4.3 Dial-A-Ride	C-18
2.5 Bicycle and Pedestrian Facilities	C-18
2.6 Railroads	C-18
2.7 Regional Plans	C-18
3.0 ISSUES	C-19
4.0 GOALS AND OBJECTIVES	C-21
5.0 PROGRAMS	C-22

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Street Classification System	C-3
2. Proposed Circulation System Improvements	C-23

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Existing Roadway Characteristics	C-5
2. Existing Traffic Volumes	C-7
3. Traffic Volumes Comparison	C-10
4. Level of Service Descriptions	C-11
5. Design Capacities of Typical Roadways	C-12
6. Existing Levels-of-Service Summary	C-14
7. Future Levels-of-Service Summary (Year 2012)	C-15
8. Traffic Accidents	C-16

1.0 INTRODUCTION

Government Code Section 65302(b) states that all General Plans must have the following:

A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, other public utilities and facilities, all correlated with the land use element of the General Plan.

Since the Circulation Element was first required in 1955, transportation technology and needs in California have changed greatly, with the emphasis today on the development of a balanced, multi-modal transportation system. The policies and programs of the Circulation Element should:

1. Coordinate the transportation and circulation system with planned land uses;
2. Promote the efficient transport of goods, and the safe and effective movement of all segments of the population;
3. Make efficient use of existing transportation facilities; and,
4. Protect environmental quality and promote the wise and equitable use of economic and natural resources.

1.1 Overview

The Circulation Element of the Hawaiian Gardens General Plan describes the existing transportation system within the City. It discusses the following items:

1. Streets and highways;
2. Parking facilities;
3. Public transportation;
4. Dial-A-Ride;
5. Bicycle and pedestrian facilities; and
6. Railroads.

The Circulation Element also includes information describing the physical characteristics of the City's roadway system, as well as information relative to existing traffic volumes, operational effectiveness of streets, and accident rates. The regional transit within the City of Hawaiian Gardens is also described. Finally, the element postulates future traffic conditions, based on proposed land uses, and establishes policies relative to these conditions.

2.0 CIRCULATION SYSTEM

2.1 Streets and Highways

The street system is not only essential to the City of Hawaiian Gardens but to the surrounding cities which must either travel through or to the City. A street system, to be effective, must be designed to accomplish certain goals. Without intelligent guidelines, streets may not be adequately designed to accommodate future planned growth.

The major street classifications are indicated on Figure 1. The routes outlined on the circulation map are general in nature and require consideration of existing conditions in each instance.

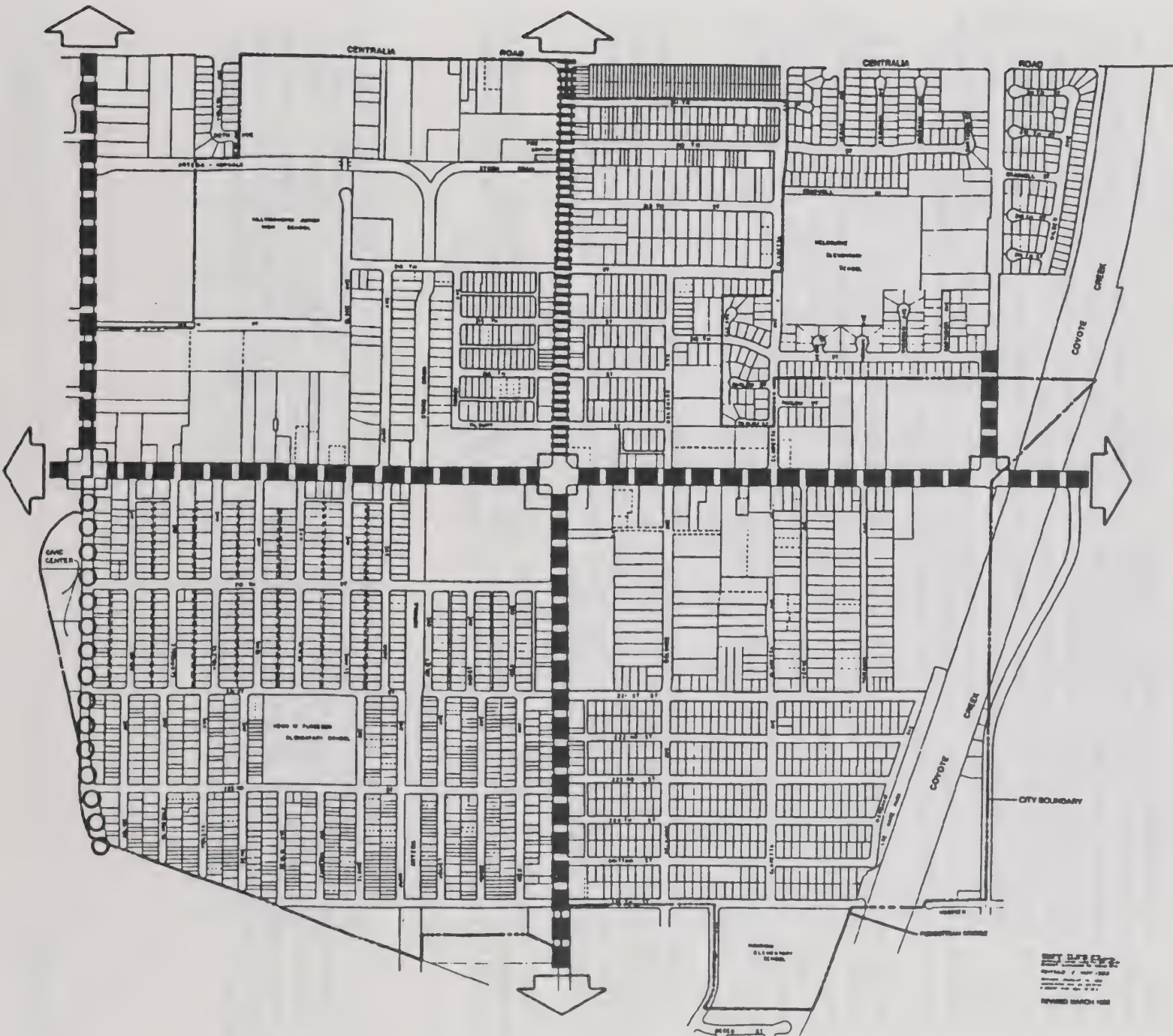
1. Majors - are interregional roads conveying traffic between communities, subdivisions, and other urban centers. Efficient movement is the primary function of arterial roads (100-foot minimum right-of-way).
2. Secondaries - conduct and distribute traffic between streets of lower order in the streets hierarchy and high order streets or major activity centers (80-foot minimum right-of-way).
3. Collectors - consist of all other non-local dedicated public streets. They are primarily intended to provide for direct public access for neighborhoods and to carry traffic to secondary and major streets (60-foot minimum right-of-way).
4. Locals - consist of all other dedicated public streets.

2.1.1 Existing Network

The City of Hawaiian Gardens encompasses an area of 0.9 square miles, and is located in southeast Los Angeles County, approximately 28 miles from downtown Los Angeles. Neighboring cities include Long Beach on the southwest, Lakewood on the north and west, and Cypress (in Orange County) on the east.

The principal regional freeway serving the City is the San Gabriel River Freeway (Interstate Route 605). The freeway is located outside of Hawaiian Gardens' jurisdiction, but provides a major regional vehicle circulation connection for the community. On and off-ramp connections at Carson Street enhance local commercial development potential. Other major transportation corridors of significant importance to the City are the San Diego Freeway (Interstate Route 405), a north-south route located south of Hawaiian Gardens; and the Artesia Freeway (State Route 91), an east-west route located about three miles north of the City.




The principal east-west arterial highway serving Hawaiian Gardens is Carson Street, a fully improved four-lane highway with a raised, landscaped median and separate left-turn lanes. An interconnected system of traffic signals provides and maintains an efficient and reasonable flow of traffic through the City. Centralia Road, also an east-west secondary highway, is at the City's northerly boundary, about one-half mile north of Carson Street.



CITY OF HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

STREET CLASSIFICATION SYSTEM

-  MAJOR HIGHWAY
-  SECONDARY HIGHWAY
-  COLLECTOR

CIRCULATION ELEMENT



City of Hawaiian Gardens
General Plan Update - 1992
Revised March 1992

LOCKMAN &
ASSOCIATES

1

FIGURE

Three major north-south streets (i.e., Pioneer Boulevard, Norwalk Boulevard and Bloomfield Avenue) serve the City of Hawaiian Gardens. Pioneer Boulevard is a collector street and generally forms the westerly edge of the City, paralleling the San Gabriel River Freeway. Norwalk Boulevard is an arterial highway which transects the center of the City in a north-south direction. Bloomfield Avenue is the third north-south arterial, and forms the eastern edge of the City. The characteristics of the major streets including pavement and right-of-way width, travel lanes, medians and parking are listed in Table 1.

2.1.2 Existing Traffic Volumes

Traffic is inventoried on Hawaiian Gardens' city streets in two year intervals. The latest inventory (conducted during February 1988 and October 1990) disclosed that Carson Street accommodates an average of 28,000 vehicles per day west of Norwalk Boulevard, and 25,200 vehicles per day east of Norwalk Boulevard. Pioneer Boulevard accommodates an average of 16,500 vehicles per day north of Carson Street, 12,600 vehicles per day between Carson Street and the San Gabriel River Freeway off-ramp, and 5,800 vehicles per day south of the freeway ramp. Norwalk Boulevard accommodates an average of 19,100 vehicles per day north of Carson Street and 16,600 vehicles per day south of Carson Street. Bloomfield Avenue accommodates an average of 11,800 vehicles per day north of Carson Street. The existing volumes by street segment and direction are listed in Table 2.

During the period from June 1982 to June 1984, traffic volumes on the City's primary street system had a growth rate varying from a low of 7 percent on Carson Street to a high of 21 percent on Pioneer Boulevard just north of 223rd Street. Traffic volumes on Hawaiian Gardens' City streets during that time experienced an overall growth rate averaging slightly above 10 percent. By contrast, the period from June 1984 to February 1988 shows a remarkable leveling off of traffic growth rates (see Table 2). A comparison of 1984 to 1988/90 traffic volumes is contained in Table 3.

The relatively high traffic growth rates from 1982 to 1984 on Hawaiian Gardens' streets were primarily a result of continued growth, both residential and commercial, in the neighboring cities of Cerritos, Lakewood, Long Beach, and Cypress. A high percentage of traffic continues to flow into Hawaiian Gardens from other localities with the San Gabriel River Freeway interchange at Carson Street as a focal point.

Pioneer Boulevard, south of 219th Street and Bloomfield Street, north of Carson Street experienced a decline in traffic volumes from 1984 to 1988. Only Norwalk Boulevard, north of Carson Street, shows a continual growth of 22 percent during the four years.

2.1.3 Existing Levels of Service

The ability of a roadway to accommodate traffic is expressed in terms of "Level of Service" (LOS) which is typically measured at critical locations. Levels of Service range from "A" (representing free-flow conditions) through "F" (representing extreme congestion). Table 4 describes the various Levels of Service categories as defined in the *Highway Capacity Manual, Transportation Research Board, 1985*. Roadway level of service is calculated in terms of volume-to-capacity ratio (v/c). Table 5 lists the typical capacities of various roadway types, as defined in the *Highway Capacity Manual*.

TABLE 1
EXISTING ROADWAY CHARACTERISTICS

Roadway Segment	Classification	Pavement Width	Right-of-Way Width	Number of Travel Lanes	Median	Parking
Bloomfield n/o Carson	Major	80'	100'	4	Yes ⁽¹⁾	Yes ⁽²⁾
Carson w/o Elaine	Major	80'	105'	4	Yes	Yes
Carson e/o Juan	Major	80'	105'	4	Yes	Yes
Carson w/o Norwalk	Major	80'	105'	4	Yes	No
Carson e/o Norwalk	Major	80'	105'	4	Yes	Yes
Carson e/o Claretta	Major	80'	105'	4	Yes	Yes
Norwalk s/o Centralia	Secondary	60'	80'	4	No ⁽³⁾	Yes
Norwalk n/o Carson	Secondary	55'-60'	80'	4	No ⁽³⁾	Yes
Norwalk s/o Carson	Major	70'-75'	90'-100'	4	No	Yes

TABLE 1
EXISTING ROADWAY CHARACTERISTICS

Roadway Segment	Classification	Pavement Width	Right-of-Way Width	Number of Travel Lanes	Median	Parking
Norwalk s/o 223rd	Major	70'	90'	4	No	Yes
Pioneer n/o Carson	Major	75'	100'	4	Yes	No
Pioneer s/o Carson	Collector	45'	70'	4	No	No
Pioneer n/o 219th	Collector	45'	65'	3	No	Yes ⁽²⁾
Pioneer s/o 219th	Collector	45'	65'	2	No	Yes
Pioneer n/o 223rd	Collector	40'	50'	2	No	No

Notes:

- 1) Painted Median Only
- 2) One Side Parking Only
- 3) No Left Turn Lane

TABLE 2
EXISTING TRAFFIC VOLUMES

Location	Count Date	Direction	Volume
Bloomfield n/o Carson	10/90	NB SB	6,082 <u>5,712</u> 11,794
Carson w/o Elaine	2/88	EB WB	13,984 <u>13,595</u> 27,579
Carson e/o Juan	2/88	EB WB	13,585 <u>13,646</u> 27,231
Carson w/o Norwalk	2/88	EB WB	13,567 <u>15,710</u> 29,277
Carson e/o Norwalk	2/88	EB WB	12,562 <u>12,547</u> 25,109
Carson e/o Claretta	2/88	EB WB	12,687 <u>12,676</u> 25,363
Norwalk s/o Centralia	2/88	NB SB	7,963 <u>7,874</u> 15,837
Norwalk n/o Carson	2/88	NB SB	8,786 <u>10,351</u> 19,137
Norwalk s/o Carson	2/88	NB SB	9,048 <u>8,024</u> 17,072
Norwalk s/o 223rd	2/88	NB SB	8,326 <u>7,843</u> 16,169
Pioneer n/o Carson	2/88	NB SB	7,700 <u>8,817</u> 16,517

TABLE 2
EXISTING TRAFFIC VOLUMES
(Continued)

Location	Count Date	Direction	Volume
Pioneer s/o Carson	2/88	NB SB	9,602 ⁽¹⁾ <u>3,025</u> 12,627
Pioneer n/o 219th	2/88	NB SB	3,724 <u>3,494</u> 7,218
Pioneer s/o 219th	10/90	NB SB	2,911 <u>2,761</u> 5,672
Pioneer n/o 223rd	2/88	NB SB	2,237 <u>2,321</u> 4,558
Belshire n/o Carson	10/90	NB & SB	1,807
Belshire s/o Carson	10/90	NB SB	1,047 <u>1,425</u> 2,472
Centralia w/o Carson	10/90	EB WB	7,309 <u>7,519</u> 14,828
Claretta n/o Carson	2/88	NB & SB	1,870
Juan n/o Carson	2/88	NB & SB	1,674
Juan s/o Carson	2/88	NB & SB	1,198
Violeta s/o Carson	2/88	NB & SB	531
214th e/o Norwalk	2/88	NB & SB	1,216

TABLE 2
EXISTING TRAFFIC VOLUMES
(Continued)

Location	Count Date	Direction	Volume
214th w/o Norwalk	10/90	EB WB	1,688 <u>1,377</u> 3,065
215th e/o Pioneer	10/90	EB WB	1,281 <u>1,177</u> 2,458
219th e/o Pioneer	10/90	EB WB	837 <u>1,100</u> 1,937
219th e/o Juan	10/90	EB WB	1,471 <u>1,934</u> 3,405
219th w/o Norwalk	2/88	EB & WB	2,637
219th w/o Elaine	10/90	EB & WB	1,471
221st e/o Norwalk	10/90	EB & WB	2,752
223rd e/o Pioneer	10/90	EB WB	984 <u>1,026</u> 2,010
223rd w/o Norwalk	10/90	EB WB	2,714 <u>2,144</u> 4,858
223rd e/o Norwalk	2/88	EB & WB	1,124
226th w/o Norwalk	10/90	EB WB	978 <u>833</u> 1,811

(1) = 605 Freeway

Source: City of Hawaiian Gardens, Machine Traffic Counts, Summary 1990 (Update); October, 1990

TABLE 3
TRAFFIC VOLUME COMPARISON

Street	1984 Count	1988 Counts	% Change
Carson w/Norwalk	27,400	28,000	2%
Carson e/Norwalk	25,200	25,200	0%
Pioneer n/Carson	16,500	16,500	0%
Pioneer s/Carson	12,600	12,600	0%
Pioneer s/219th	6,000	5,800	-3%
Norwalk n/Carson	15,600	19,100	22%
Norwalk s/Carson	16,600	16,600	0%
Bloomfield n/Carson	13,700	11,794 ⁽¹⁾	-16%

Note:

(1) 1990 Count

Sources: City of Hawaiian Gardens, 1990; Lockman & Associates, 1992

TABLE 4
LEVEL-OF-SERVICE DESCRIPTIONS
ROADWAY SECTIONS⁽¹⁾

Level of Service	Interpretation	Normal Range of Volume-to-Capacity Ratio
A	Low volumes; primarily free-flow operations. Density is low and vehicles can freely maneuver within the traffic stream. Drivers can maintain their desired speeds with little or no delay.	0.00-0.60
B	Stable flow with potential for some restriction of operating speeds due to traffic conditions. Maneuvering is only slightly restricted. The stopped delays are not bothersome, and drivers are not subject to appreciable tension.	0.61-0.70
C	Stable operations; however, the ability to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signed coordination or longer queues cause delays.	0.71-0.80
D	Approaching unstable traffic flow, where small increases in volume could cause substantial delays. Most drivers are restricted in their ability to maneuver and in their selection of travel speeds. Comfort and convenience are low but tolerable.	0.81-0.90
E	Operations characterized by significant approach delays and average travel speeds of one-half to one-third the free-flow speed. Flow is unstable and potential for stoppages of brief duration. High signal density, extensive queuing, or signal progression/timing are the typical causes of the delays.	0.91-1.00
F	Forced flow operations with high approach delays at critical signalized intersections. Speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion.	Not Meaningful

Note:

- (1) *Highway Capacity Manual, Special Report 209*, Transportation Research Board, 1985

TABLE 5
DESIGN CAPACITIES OF TYPICAL ROADWAYS⁽¹⁾

	Peak-Hour Capacity	Daily Capacity
2-lane Local	1,100	14,000
4-lane Undivided Collector (No Parking)	2,500	31,000
4-lane Divided Arterial (with left-turn lane)	2,800	35,000
4-lane Divided Arterial (with left-turn lane and 90 feet of pavement)	3,230	40,400
6-lane Divided Arterial (with left-turn lane)	4,200	53,000
6-lane Divided Expressway (with left-turn lane)	5,100	64,000
6-lane Freeway	9,000	112,000

Note:

- (1) Capacities based on *Highway Capacity Manual*, Transportation Research Board, 1965; and *Interim Materials on Highway Capacity*, TRB Circular No. 212, January 1980

Table 6 summarizes the existing average daily traffic volumes and Levels of Service for each of the roadways listed in Table 1. This Table shows that most of the roadways are operating at Level of Service "C" or better. Carson Street, just west of Norwalk Boulevard, is operating in the lower range of Level of Service "D".

2.1.4 Future Traffic

The cities of Cerritos, Lakewood, Long Beach, and Cypress have little remaining undeveloped land which, at build-out, will have little impact on traffic volumes in Hawaiian Gardens. Future traffic increases in Hawaiian Gardens are expected to be minimal and will have little adverse effect on the traffic carrying capability of the City's street system. Regional growth has shown signs of leveling off, and annual traffic growth rates have subsided accordingly. Looking toward the year 2012 (20 years), it is anticipated that traffic growth will be greatly reduced, leveling off to an estimated annual growth rate of less than one percent per year. A one percent per year increase in traffic was used to calculate future LOS for each major street, in the year 2012 (Table 7). The one percent increase is reflective of the projected increase in the population of the City, as determined by the Southern California Association of Governments (SCAG). This growth rate will not be significantly affected by the minor changes in the land use pattern that are proposed in the Land Use Element.

Based on these calculations, it is anticipated that all major streets within the City will be operating below capacity in year 2012, except for Carson Street, which will be at or beyond capacity (LOS, D, E or F). In the latter part of the planning period (1992-2012), Carson Street may require widening to three lanes in each direction. This could be accomplished by prohibiting parking on both sides of the street and striping an additional lane.

2.2 Accidents

According to the California Statewide Integrated Traffic Records System (SWITRS) Report for 1990, there were 207 accidents involving motor vehicles within the City of Hawaiian Gardens. Over 57 percent (119) were with other moving motor vehicles, and 19 percent (39) were with parked motor vehicles. The balance was with pedestrians (14), bicycles (9), fixed objects (23), and other (3). The total number of accidents resulted in 104 injured victims and one death. Traffic-related accidents occur at all times of the day but seem to peak at lunch time (12 noon - 1 p.m.) and right after the workday (5 pm. - 7 p.m.). Of all accidents, 13 percent were drug/alcohol related (27 of 207).

A summary of accidents by major intersections is contained in Table 8.

When accidents exceed 2.0 accidents/million vehicles entering the intersection, it usually indicates that there is an accident problem. The City of Hawaiian Gardens' accident rates are one-half to one-quarter of the rates considered to be a problem.

2.3 Parking Facilities

Parking facilities for existing older commercial and industrial land uses is significantly limited. These uses rely heavily on public street parking. As new development takes place, either by private enterprise or the Redevelopment Agency, adequate parking is provided in accordance with the parking regulations in the City's Zoning Code (Chapter 18.24). As traffic volumes increase, and as it becomes politically acceptable, certain on-street parking spaces are removed. This has occurred at intersections where additional lanes, including right-turn lanes, became necessary. This trend is expected to continue.

TABLE 6
EXISTING LEVEL-OF-SERVICE SUMMARY

Roadway Segment	Average Daily Traffic Volumes	Daily Capacity	V/C ⁽¹⁾	LOS ⁽²⁾
Bloomfield n/o Carson	11,794	35,000	.33	A
Carson w/o Elaine	27,597	35,000	.78	C
Carson e/o Juan	27,231	35,000	.77	C
Carson w/o Norwalk	29,277	35,000	.83	D
Carson e/o Norwalk	25,109	35,000	.71	C
Carson e/o Claretta	25,363	35,000	.72	C
Norwalk s/o Centralia	15, 837	31,000	.51	A
Norwalk n/o Carson	19,137	31,000	.61	B
Norwalk s/o Carson	17,072	31,000	.55	A
Norwalk s/o 223rd	16,169	31,000	.52	A
Pioneer n/o Carson	16,517	35,000	.47	A
Pioneer s/o Carson	12,627	31,000	.40	A
Pioneer n/o 219th	7,218	14,000	.51	A
Pioneer s/o 219th	5,672	14,000	.40	A
Pioneer n/o 223rd	4,558	14,000	.32	A

Notes:

- (1) Volume to capacity range
- (2) Levels-of Service, See Table 4 for Definitions

TABLE 7
FUTURE LEVEL-OF-SERVICE SUMMARY (Year 2012)

Roadway Segment	Average Daily Traffic Volumes ⁽¹⁾	Daily Capacity	V/C ⁽²⁾	LOS ⁽³⁾
Bloomfield n/o Carson	14,248	35,000	.40	A
Carson w/o Elaine	33,339	35,000	.95	E
Carson e/o Juan	32,897	35,000	.93	E
Carson w/o Norwalk	35,369	35,000	1.01	F
Carson e/o Norwalk	30,334	35,000	.86	D
Carson e/o Claretta	30,641	35,000	.87	D
Norwalk s/o Centralia	19,132	31,000	.61	B
Norwalk n/o Carson	23,119	31,000	.74	C
Norwalk s/o Carson	20,264	31,000	.65	B
Norwalk s/o 223rd	19,533	31,000	.64	B
Pioneer n/o Carson	19,954	35,000	.57	A
Pioneer s/o Carson	15,254	31,000	.49	A
Pioneer n/o 219th	8,720	14,000	.62	B
Pioneer s/o 219th	6,852	14,000	.48	A
Pioneer n/o 223rd	5,506	14,000	.39	A

Notes:

- (1) Assumes one percent per year increase
- (2) Volume to Capacity Ratio
- (3) Levels of Service

TABLE 8
TRAFFIC ACCIDENTS

Intersection	Traffic Volume	1990 Accidents	Accidents per Million Vehicles ⁽¹⁾
Bloomfield & Carson	SB 5,712 EB 12,687 WB <u>12,676</u> 31,075	6	.52
Carson & Norwalk	EB 13,567 WB 12,547 SB 10,351 NB <u>9,048</u> 45,513	18	1.08
Carson & Norwalk	EB 13,984 WB 13,595 SB 8,817 NB <u>9,602</u> 45,998	9	.53

Note:

$$(1) \quad \text{Rate} = \frac{(\text{Accidents per year}) (10^6)}{(\text{Entering Volume}) (365)}$$

Source: SWITRS, Table 6, 1990

Although the codes and policies of many existing cities require adequate parking, the South Coast Air Quality Management District (SCAQMD) is encouraging less development of parking as a way to encourage increased use of ride sharing, mass transit, bicycles and pedestrian activities. The philosophy is that if less people drive fewer miles, air quality can be improved.

The City of Hawaiian Gardens may desire to periodically review this concept to see if it would be desirable in the City. The issue of parking should be consistent with the Air Quality Element.

2.4 Public Transit and Paratransit

The City of Hawaiian Gardens does not maintain any fixed routes within the City. The City adopted the County of Los Angeles Paratransit Plan, by reference, on June 23, 1992. Fixed route transit is provided by Long Beach Transit and Southern California Rapid Transit.

2.4.1 Long Beach Transit

Long Beach Transit provides bus service to the City of Hawaiian Gardens via transit routes 15, 102 and 173, as described below.

Route 15

Route 15, the "Del Amo Route" is located just north of the City of Hawaiian Gardens, and provides service along Centralia, to Bloomfield, where it intersects Del Amo Boulevard and services the Lakewood Center Mall and the Del Amo Boulevard Blue Line Rail Station. This station serves as a link to downtown Long Beach and downtown Los Angeles. The Del Amo Route enables transfers to 14 north-south routes, extending from Paramount and Bellflower to downtown Long Beach.

Route 102

Route 102, the "Willow/Spring Route" originates at the Naval Hospital on Carson Street, proceeds eastbound on Carson through Hawaiian Gardens to Norwalk Boulevard, and continues south on Norwalk Boulevard to Wardlow Street. The route continues along Wardlow Street, Studebaker Road, and Spring Street, then to Willow Street, passing Memorial Medical Center and Pacific Hospital in uptown Long Beach. This route crosses 26 different north-south routes.

Route 173

Route 173, the "Pacific Coast Highway/Studebaker Route", originates in the Artesia Civic Center, with service to Norwalk Boulevard, Carson Street, and Studebaker Road, and continues into downtown Long Beach.

2.4.2 Southern California Rapid Transit District

Route 462

Route 462 passes through Hawaiian Gardens along Pioneer Boulevard. This is an RTD rush-hour bus route to downtown Los Angeles. The route begins and ends at the intersection of Carson Street and Norwalk Boulevard, located in the center of the City.

2.4.3 City of Hawaiian Gardens Dial-A-Ride

Hawaiian Gardens Dial-A-Ride is a senior and handicapped ridership program offered free to City residents. The service is designed for the self-sufficient person, and is not an ambulance type service. The program operates Monday through Friday from 9 a.m. to 4:30 p.m., providing service within a five mile radius of Hawaiian Gardens to the outlying cities of Long Beach, Artesia, Lakewood, Cypress and Los Alamitos.

2.5 Bicycle and Pedestrian Facilities

Bicycle riding is permitted and encouraged on City streets. Many elementary and junior high students ride their bicycles to school. Regional bicycle and pedestrian travel routes exist along the San Gabriel River and the Los Coyotes Creek. These bike paths originate in Seal Beach and split off into the San Gabriel Valley (river route), and inland along the Los Angeles/Orange County Boundary (Los Coyotes Creek route). Bicycle facilities are further discussed in the Open Space/Recreation Element.

2.6 Railroads

No freight or passenger rail service is available within the City of Hawaiian Gardens. The closest railroad facility is the Southern Pacific Transportation Company tracks and right-of-way located three-quarters of a mile northeasterly of the City of Hawaiian Gardens. This corridor is presently under evaluation by the Los Angeles County Transportation Commission for use as a passenger rail line from the new Norwalk/LAX line to Disneyland. Potential stops include Paramount, Bellflower, Los Cerritos Mall (Cerritos), Cypress College, Stanton and the Disneyland Hotel.

2.7 Regional Plans

The most recent Metropolitan Area, County of Los Angeles, Highway Plan (last amended July 10, 1986) designates Carson Street as a major highway (100 feet wide) and Pioneer Boulevard and Bloomfield Avenue north of Carson as major highways (100 feet wide). Norwalk Boulevard, south of Carson, is also a major highway (100 feet wide). Norwalk, north of Carson, is designated as a Secondary Highway (80 feet wide). Centralia Street is also designated a Secondary Highway (80 feet wide).

3.0 ISSUES

During the next 20 years, the City of Hawaiian Gardens will experience continued growth and development throughout the community. It is anticipated that additional commercial activity will be concentrated on Carson Street and on Norwalk Boulevard. Redevelopment of older areas of the City can also be expected, possibly into additional single-family homes, patio homes, condominiums and/or apartments or additional industrial/commercial development. Looking toward ultimate buildout, certain minor improvements may be necessary to adequately accommodate anticipated traffic requirements. Some of the issues to be addressed are contained in the following text.

3.1 Direct Access Between Carson Street and 215th Street

Access to 215th Street and the Killingsworth School area is now taken from Pioneer Boulevard at 215th Street and from Juan Avenue to 214th Street. The paramount consideration in reviewing any development plan for the area shall be the provision of safe and efficient pedestrian access for school children from the southern portion of the City to Killingsworth Junior High School.

3.2 Substandard Width Streets

Several of the City's residential streets are 30 feet wide between curbs. By current standards, this width is considered substandard for two-way traffic flow and parking. Existing right-of-way (50 feet) is sufficient to permit widening of most streets to 36 feet with 7-foot parkways.

3.3 Median Islands

The median on Carson Street was designed and constructed to eliminate left turns at several local streets intersecting the south side of Carson Street. These closures then permitted the median to be constructed with left-turn lanes of sufficient length to accommodate left-turn demands at the more critical intersections. Without the closures, left-turn lane lengths would be substandard resulting in turning vehicles storing into through traffic lanes. Existing median openings on Carson Street provide satisfactory access to abutting commercial development and should not be altered.

Norwalk Boulevard, north of 226th Street/Woodson Street, is a major highway and is the only surface street route into the City from neighboring Long Beach to the south. Abutting land is zoned for commercial use and, like Carson Street, has the potential for development oriented toward shoppers. Area beautification can be attained by undergrounding utilities and constructing a raised, landscaped median divider with double arm street standards installed in the median area. A raised median should extend initially from Carson Street to the south City boundary about 300 feet south of 226th/Woodson Street. Existing roadway width's will accommodate this proposal with no loss of curbside parking space.

3.4 Traffic Signal Needs

Traffic signal operation on Carson Street has been improved through completion of the Carson Street Interconnected Traffic Signal System, designed and administered by the Los Angeles County Road Department.

Several potential traffic signal locations have been identified for future consideration. These are listed as follows:

1. **Carson Street and Belshire Avenue**

This intersection is experiencing increased traffic growth generated by new development north and south of Carson Street.

2. **Norwalk Boulevard at 219th Street**

The redevelopment of the Bloomfield School site to commercial uses has generated increased vehicle and pedestrian traffic. Additional traffic controls may be necessary to accommodate anticipated increased traffic volumes generated by this commercial development.

3. **Norwalk Boulevard at 216th Street**

A signal at this intersection would provide greater monitoring of traffic flow on Norwalk Boulevard through the City's Business District, thereby increasing safety levels for pedestrians and motorists alike.

3.5 Carson Street at Claretta Avenue

Development along Carson Street, especially in the area east of Belshire Avenue will create a need for improved street patterns. A southerly extension of Claretta Avenue south from Carson Street would address circulation needs.

3.6 605 Freeway Off-Ramp at Pioneer Boulevard

The northbound off-ramp at Pioneer Boulevard is located approximately 250 feet south of the intersection of Pioneer Boulevard and Carson Street. Both intersections are signalized, and during peak hours, the location experiences severe congestion problems. Various options will be investigated to solve this problem.

3.7 Other Circulation Issues

Other circulation issues include: the dead-end streets between Arline Avenue and Seine Avenue south of 223rd Street; Farlow Street east of Claretta Avenue; 215th Street east of Belshire; 226th Street at Los Coyotes Creek; Elaine Avenue north of 214th Street; and Juan Avenue south of Centralia. Additional circulation issues to be addressed are the various alleys, and pedestrian access north of Killingsworth Junior High School.

4.0 GOALS AND OBJECTIVES

The goals and objectives for the Hawaiian Gardens Circulation Element are discussed below:

GOALS

- 1. Develop and promote safe, convenient and efficient systems of circulation for automobiles, pedestrians, bicycles and public transport;**
- 2. Provide a circulation system which supports and is consistent with planned land use;**
- 3. Promote the safe and efficient transport of goods; and**
- 4. Protect environmental quality, and promote the wise and equitable use of economic and natural resources.**

Objectives

- 1.1 To provide a street system which complements the desired physical development of the City, and best serves the needs of the community;**
- 1.2 To implement proposed circulation improvements, and provide for maintenance and future improvements to the circulation system, as necessary;**
- 1.3 Provide for the safe movement of vehicles and pedestrians by reducing hazards through proper design and forethought; and**
- 1.4 To implement, to the extent feasible, the recommendations of the Congestion Management Plan.**
- 1.5 To participate in Regional/County programs that affect/benefit Hawaiian Gardens. This may include, but is not limited to, County paratransit planning and programs.**

5.0 PROGRAMS

The goals and objectives of the Circulation Element (Section 1.2) are to implement proposed circulation improvements and provide for maintenance and future improvements to the circulation system, as necessary. Specific programs, as discussed below, will be implemented to attain these goals and objectives. The proposed circulation system improvements are indicated on Figure 2.

5.1 Carson Street/215th Street Access

The City shall insure that the ultimate development of the Pioneer/Carson Development Area provides appropriate vehicular and pedestrian access between Carson Street and 215th Street. The extension of Violeta Avenue (presently signalized at Carson Street) appears feasible, and would establish greatly improved access to the northwest area of the City. A precise alignment will need to be determined, and the street extension developed in conjunction with the redevelopment of property in the immediate vicinity.

5.2 New Development - Roadway Improvements

To insure that existing roadways provide an adequate level of service to the neighborhoods it serves, the City shall require the dedication of right-of-way, and the installation of ultimate improvements or deposit of the appropriate fees (as determined by the City Engineer) for the ultimate improvements of any street which is currently designated as undersized.

5.3 Future Traffic Signals

Any new development which impacts these intersections shown in Figure 1 as requiring future signalization, shall deposit their fair share portion of funding for the ultimate installation of the signal. The fair share funding shall be determined by the City Engineer.

5.4 Streetscape

Construct the streetscape recommendations of the Urban Design Element and, to reduce circulation conflicts, proceed with the construction of a new median on Norwalk Boulevard, south of Carson Street. The project should include the undergrounding of existing overhead utilities and incorporate design objectives similar to those proposed along the Carson Street medians. Certain parking spaces at strategic locations may require removal to accommodate additional traffic in the planning period.

5.5 Other Circulation Improvements

5.5.1 Arline Avenue, Clarkdale Avenue, Violeta Avenue, Seine Avenue

These four dead-end streets present a multitude of problems from fire safety/service to public safety and protection. Recommended improvements include: connecting the streets through the acquisition of a 40-foot right-of-way, adjacent to the southerly City boundary, between Arline Avenue and Clarkdale Avenue, and between Violeta Avenue and Seine Avenue; construction of 30 feet of pavement with 5 feet of planter against the wall along the south side of the street, and a 5-foot sidewalk along the north side of the street; and planting the south side with thorny vine (e.g., Bougainvillea) to add color and prevent graffiti.

CITY OF HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992



Possible future traffic
signal



Proposed street
alignment



Street widening within
existing R.O.W.



Street widening with
additional dedication
required



Proposed median

PROPOSED CIRCULATION SYSTEM IMPROVEMENTS

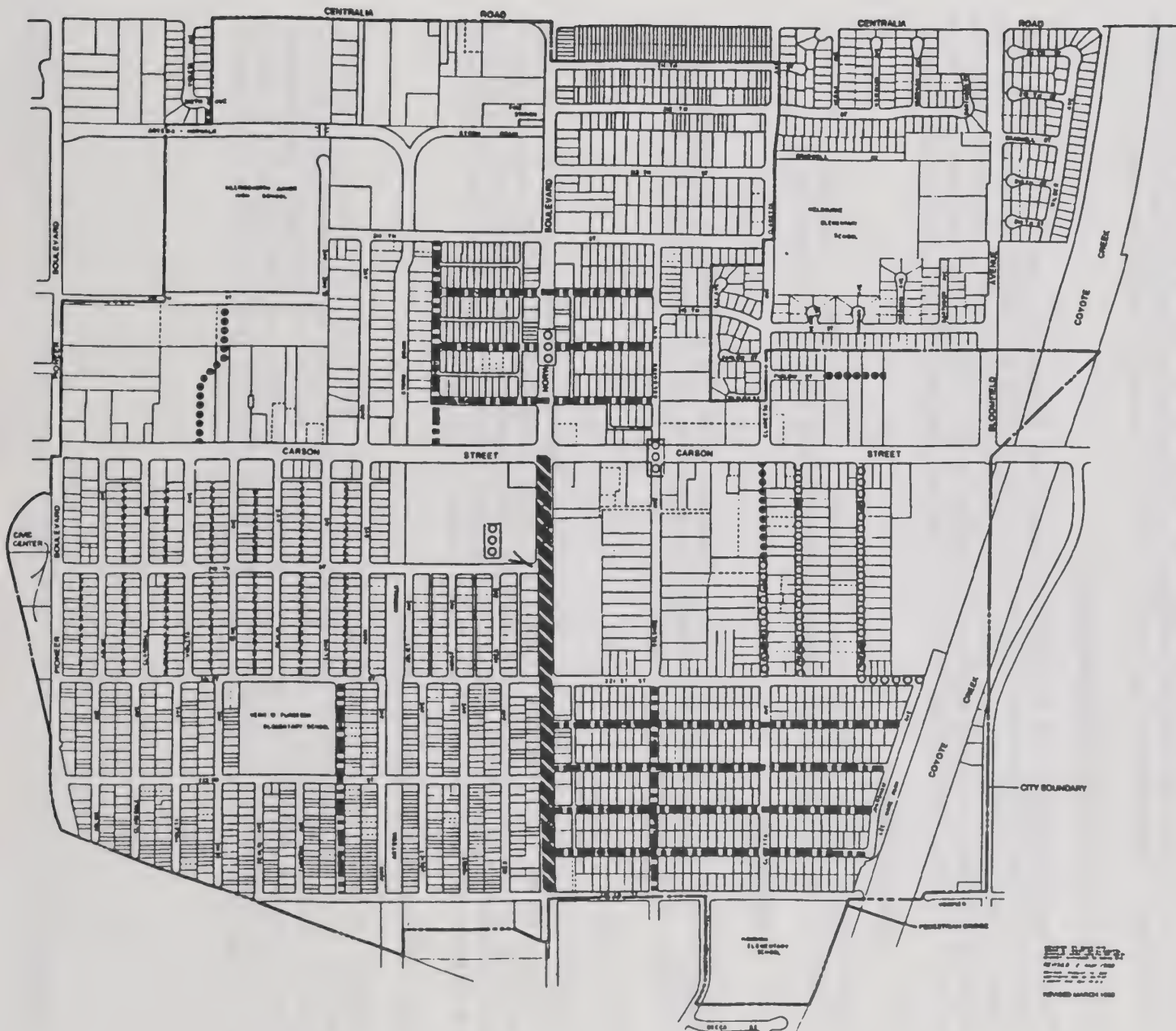
CIRCULATION ELEMENT



LOCKMAN &
ASSOCIATES

2

FIGURE



5.5.2 Farlow Street

Farlow Street, east of Claretta Avenue, presently has 12 residential units and ends at the Lions Club. This street may be extended with future relocation of the Lions Club and development of residential uses. Pedestrian access to existing shopping at Carson Street and Bloomfield Avenue should be provided.

5.5.3 215th Street

215th Street, east of Belshire Avenue, presently has a barrier along the City boundary line. The City will evaluate the feasibility of removing this barrier, and thereby providing circulation to Lakewood. This action will also result in public services and safety for the community.

5.5.4 226th Street and Wardham Avenue

226th Street at Coyote Creek is presently a cul-de-sac. The existing ownership pattern to the north may allow the extension of Wardham Avenue from its present terminus at Brittain Street, through to 226th Street. The City will investigate this possible extension, as well as adding pedestrian and bicycle access to Lee Ware Park, and re-opening the pedestrian bridge with night lighting. The high cost prohibits providing a vehicular bridge across Coyote Creek.

5.5.5 Elaine Avenue

Elaine Avenue, north of 214th Street, is presently a cul-de-sac. Depending on specific development of the vacant land to the east, this street may be able to be vacated.

5.5.6 Juan Avenue

Juan Avenue, south of Centralia Road, functions more like a industrial driveway used in connection with the commercial/industrial development. As the remaining residential uses are relocated, this street may be vacated.

5.5.7 Alleys

As commercial uses along the south side of Carson Street are developed, the east-west alleys could be vacated. The existing north-south alleys along both sides of Norwalk Boulevard should be preserved. In the future, the City should consider reestablishing the north-south alleys between Pioneer Boulevard and Juan Avenue between Carson Street and 221st Streets, as a means to provide rear parking to higher density R-2 developments.

5.5.8 Killingsworth Pedestrian Access

Although there may not be a viable solution, access for students north of Killingsworth Junior High School is still a circulation issue within the community and necessitates further study by the City. The investigation should include a review of the number of existing and potential future students residing to the north, and drafting of possible design solutions for access, if found to be desirable. The analysis will evaluate the use of an existing crossing to be located south of the terminus of Seine Avenue at the storm drain channel.

5.5.9 605 Freeway Off-Ramp at Pioneer

The present congestion and circulation problems will be analyzed to determine the appropriate program. Design changes to the freeway off-ramp, changes in signalization, and other options will be evaluated for implementation in conjunction with Caltrans.

CITY OF HAWAIIAN GARDENS
GENERAL PLAN UPDATE



**HOUSING
ELEMENT**

HOUSING ELEMENT

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	H-1
1.1 Purpose and Intent	H-1
1.2 Organization of the Element	H-1
1.3 Relationship to Other Elements of the General Plan	H-2
1.4 Citizen Participation	H-2
2.0 REVIEW AND EVALUATION OF PREVIOUS ELEMENT	H-3
2.1 Effectiveness of the Element	H-3
2.2 Implementation and Appropriateness	H-3
2.2.1 Provision of Decent and Adequate Housing	H-4
2.2.2 Housing Rehabilitation Assistance	H-5
2.2.3 Housing Affordability	H-5
2.2.4 Energy Self-Sufficiency	H-5
2.2.5 Implementation, Review and Analysis of Housing Program	H-5
3.0 HOUSING NEEDS ASSESSMENT	H-7
3.1 Housing Characteristics	H-7
3.1.1 Existing Conditions	H-7
3.1.2 Number and Types	H-8
3.1.3 Tenure	H-10
3.1.4 Housing Costs	H-10
3.2 Population Characteristics	H-10
3.2.1 Growth	H-10
3.2.2 Household Size	H-10
3.2.3 Income	H-15
3.3 Housing Needs	H-17
3.3.1 Existing Needs	H-18
3.3.1.1 Share of Regional Housing Needs	H-18
3.3.2 Future Needs	H-19
3.3.3 Special Housing Needs	H-21
3.3.3.1 Disabled Households	H-21
3.3.3.2 Elderly Persons	H-21
3.3.3.3 Large Families	H-23
3.3.3.4 Overcrowded Households	H-23
3.3.3.5 Female-Headed Households	H-24
3.3.3.6 Farmworkers	H-24
3.3.3.7 Small Group Home and/or Hospice Needs	H-25
3.3.3.8 Families and Persons in Need of Emergency Shelter	H-25
3.3.4 Energy Conservation	H-27
3.4 Units at Risk	H-28

TABLE OF CONTENTS
(continued)

	<u>Page</u>
4.0 RESOURCES AND CONSTRAINTS	H-29
4.1 Land Inventory	H-29
4.1.1 Vacant and Underused Land	H-29
4.1.2 New Housing Supply	H-29
4.2 Governmental Constraints	H-29
4.2.1 Land Use Controls	H-30
4.2.2 Site Improvements	H-32
4.2.3 Building Codes and Enforcement	H-32
4.2.4 Fees and Exactions	H-33
4.2.5 Local Processing and Permit Procedures	H-33
4.2.6 Availability of Financing	H-33
4.2.7 Price of Land and Cost of Construction	H-36
5.0 GOALS, POLICIES, PROGRAMS, AND QUANTIFIED OBJECTIVES	H-37
5.1 Maximum Units	H-44

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Evaluation of 1984-1989 Objectives	H-4
2. 1989 Housing Conditions Survey 1989	H-9
3. Housing Types	H-9
4. Monthly Housing Costs of Owners	H-11
5. Monthly Contract Rent	H-12
6. City Population Trends	H-13
7. Size of Households	H-14
8. Income Ranges by Categories (1989)	H-15
9. Income Distribution	H-16
10. Existing Housing Profile Summary	H-17
11. Existing Housing Needs by Income and Tenure	H-19
12. Future Housing Needs by Income Level	H-20
13. Disabled Persons	H-22
14. Population Distribution by Age and Sex	H-23
15. Large Families	H-24
16. Homeless Sub-Groups	H-26
17. General Plan Residential Land Use Designations	H-31
18. Zoning Designations	H-31
19. Permit and Processing Fees	H-34

1.0 INTRODUCTION

1.1 Purpose and Intent

The fundamental purpose and intent of the element is to: 1) provide a framework for responding to locally identified housing needs, and 2) fulfill the statutory and regulatory requirements of the State of California for Housing Elements. Section 65583 of the Government Code contains the legislative definition of a housing element, as follows:

"The housing element shall consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The housing element shall identify adequate sites for housing and mobile homes, and shall make adequate provisions for the existing and projected needs of all economic segments of the community."

The Legislature has found and declared as follows:

1. The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest importance.
2. The attainment of housing goals requires the cooperative participation of government and the private sector in an effort to expand housing opportunities and accommodate the housing needs of Californians of all economic levels.
3. The provision of housing affordable to low and moderate income households requires the cooperation of all levels of government.
4. Local and State governments have a responsibility to use improvement and development of housing to make adequate provisions for the housing needs of all economic segments of the community.
5. The Legislature recognized that in carrying out this responsibility each local government also has the responsibility to consider economic, environmental, and fiscal factors and community goals set forth in the General Plan and to cooperate with other local governments and the State in addressing regional housing needs.

It is the underlying intent of these findings and compliance with the provisions of Article 10.6 that provide foundation for this housing element.

1.2 Organization of the Element

The format and content of the Hawaiian Gardens housing element is organized as follows:

1. An assessment of housing characteristics, including housing stock condition, population and employment projections. Also, an assessment of housing needs, including existing need, fair share of regional housing need, future needs, and special needs;

2. An inventory of resources and constraints, both governmental and nongovernmental, such as land supply, zoning, public services and facilities, local processing and permit procedures, housing costs, and other related factors;
3. A statement of the community's goals, quantified objectives and policies relative to the maintenance, improvement and development of housing; and
4. An implementation program which sets forth a five year schedule of actions which the City of Hawaiian Gardens is undertaking or intends to undertake to implement the administration of land use and development controls, provision of regulatory concessions and incentives, and the utilization of appropriate Federal and State financing and subsidy programs when available.

1.3 Relationship to Other Elements of the General Plan

The housing element is an integral part of the General Plan, and contains goals, objectives and policies which both complement and support the other elements of the General Plan. While there may be an overlap between the implementation measures of the housing element and other elements of the General Plan, such overlap should not result in conflicting policies. Specifically, the housing element is designed to encourage the development of safe, clean, and decent housing for all segments of the community. The development of housing relates directly to the standards contained within the land use element as to density, location, and development standards. Projected housing developments must be achieved within the limitations set forth by both the land use and housing elements. Therefore, the two elements support one another in the common goal of achieving quality development. Similar relationships exist between all elements of the General Plan.

1.4 Citizen Participation

The Hawaiian Gardens Housing Element revision was prepared with community input, including review and analysis by the General Plan Update Committee, which was made up of two Planning Commissioners, two Public Safety Commissioners, two Recreation Commissioners, and three residents at-large. The Committee members were chosen by members of the City Council, and represented the diversity of the City, including lower-income and Spanish-speaking residents. The proposed Housing Element was reviewed at duly noticed public meetings of the General Plan Update Committee and the Planning Commission Public Hearing. These meetings were also televised on the local Community Access Channel. The Housing Element will be subject to one additional Public Hearing before the City Council.

2.0 REVIEW AND EVALUATION OF PREVIOUS ELEMENT

This section is devoted to the review of the previous (1984) Housing Element. Pursuant to Government Code Section 65588, the review shall evaluate the appropriateness, effectiveness and progress in implementation of the previous Element in order to facilitate an effective updating of the Element.

2.1 Effectiveness of the Element

In reviewing the actual results of the earlier Element's goals, it has been found that many of the goals and objectives have either been met, or are continuing to be addressed in ongoing programs.

The City's goal achievements for the 1984-1989 time frame included:

1. The provision of decent and adequate housing for all residents and those who choose to be residents of Hawaiian Gardens, regardless of age, sex, marital status, ethnic background, religion, income, or other arbitrary factors;
2. Improve the housing quality of existing housing stock through housing rehabilitation assistance efforts and enforcement procedures;
3. The City will strive to assist in achieving housing affordability for all residents, as is reasonably and financially possible;
4. The City will assure increased energy self-sufficiency through use of energy conservation measures in all homes, including low- and moderate-income housing;
5. Assure that the goals, implementation measures and specific housing programs in this document are pursued within the established time frame, and continue to be compatible with other Elements of the General Plan. Continue to stimulate participation in annual review among all economic segments of the community; and
6. The City will continue to monitor housing and pursue housing programs to meet future needs.

The quantitative objectives stated in the 1984-1989 Housing Element are presented in Table 1, along with the actual achievements.

2.2 Implementation and Appropriateness

The following is an analysis of the significant differences between what was projected and what was actually achieved, and how the updated Element will incorporate and reflect what was learned from the analysis.

TABLE 1
EVALUATION OF 1984-1989 OBJECTIVES

Objective	1984-1989 Goal	Achievements
1. Assistance for construction of new units.	181 units	101 Senior Units
2. Assistance for rehabilitation of existing units.	62 units/year	11 units - CRA 14 units - CDBG
3. Removal of dilapidated and unsafe units and provision of replacement housing on unit-by-unit basis.	5 units/year	0
4. Section 8 Rental Assistance Programs.	41 units/year	75
5. Energy conservation Rehabilitation Program.	50 grants	0

2.2.1 Provision of Decent and Adequate Housing

The previous Element identified the need for a review and revision of the existing zoning and subdivision regulations to allow for flexibility in lot sizes and housing types, and a general plan/zoning conformance analysis to amend City land use policy pursuant thereto. The City's zoning ordinance was reviewed in 1989, and the subdivision ordinance of Los Angeles County was incorporated by reference. Conformance analysis has partially been completed, and the present General Plan Update process (1991-1992) will aid in the completion of this task. The previous Element set an objective of the construction of 181 units of affordable low-income housing for senior citizens as well as families. The City, in coordination with the Redevelopment Agency, would apply for Mortgage Bond Allocations, as requested by developers, to construct new housing. In accomplishing this goal and objective, 101 new senior units were constructed in 1990, and the 54 housing units removed due to Redevelopment Activities have been replaced on a ratio of 15 to 1.

2.2.2 Housing Rehabilitation Assistance

The number of existing units targeted for rehabilitation assistance was 62 units per year. In pursuit thereof, the City Redevelopment Agency provided assistance for the rehabilitation of approximately 11 units, and the Community Development Block Grants (CDBG) Program rehabilitated 14 dwelling units. Removal and replacement of unsafe, dilapidated housing units was not accomplished. On-going efforts in pursuit of this goal include housing add-on allowances to reduce over-crowding, modifications to accommodate the needs of handicapped households, and CDBG for minor repairs and below market interest rate loans for moderate to major repairs.

2.2.3 Housing Affordability

The City set as a goal to provide Section 8 rental assistance for 41 households per year. This program was only recently implemented, and revised goals and objectives are contained within the 1992 Housing Element update. To address the needs of owner-occupied affordable housing, the Redevelopment Agency entered into the SB-99 Mortgage Revenue Bond Program. The bond program will provide assistance to approximately 400 new residential units, and 65 new and existing units.

2.2.4 Energy Self-Sufficiency

The City's policies promoted the use of energy conservation measures and development of opportunities for use of solar energy. As part of the City's Housing Rehabilitation Program, the City is required to notify participating residential property owners of "Cost Effective Energy Conservation Standards" that residents may want to use. These include the following:

1. Weatherstrip doors and windows if adequate or non-existent.
2. Caulk, gasket, or otherwise seal all openings, cracks, or joints in the building envelope when existing materials are inadequate. Replace all loose or brittle caulking with new elastomeric material. Leave bottom edge of siding uncaulked to allow moisture drainage.
3. Install insulation where particular housing elements are to be exposed or made accessible as part of the rehabilitation work to be performed.

Utilizing State Office of Economic Opportunity (OEO) financing, a "weatherization" program for installation of energy conservation measures in low- and moderate-income housing was targeted, with the objective of 50 grants by 1989. This program was not implemented.

2.2.5 Implementation, Review and Analysis of Housing Program

The City has not implemented an annual review of the Housing Element implementation schedule, and in light of the evidence that many of the previous Element's goals were not met, this program may be more important than ever. The City attempted a five-year update of the Element, parts of which are incorporated into the 1992-2012 Element.

The City continues to publicize and make available low-interest rehabilitation loans, and is presently developing a building code enforcement program for all multiple-family rental units.

Revised goals, policies, objectives, and implementation programs are detailed in Section 5 of this Element.

3.0 HOUSING NEEDS ASSESSMENT

This section of the housing element contains the assessment of the existing and projected housing needs of the City of Hawaiian Gardens. The primary data sources for information utilized in this analysis were the SCAG Regional Housing Needs Assessment, 1990 Census data, and the Housing Market Need Studies conducted for the City of Hawaiian Gardens in 1988. The housing needs assessments includes the following:

1. Analysis and documentation of housing characteristics, including existing housing stock conditions, number and types of housing units, and housing costs;
2. Analysis of population characteristics, including growth, employment trends and income, and other household characteristics, such as size, ability-to-pay, and overcrowding;
3. Analysis of housing needs, including documentation of the locality's current and projected housing needs for all income levels. Such existing and projected needs include the City's share of all regional housing needs;
4. Analysis of any special housing needs, such as those of the handicapped, elderly, large families, farm workers, the homeless, and families with female heads of households; and
5. Analysis of opportunities for energy conservation with respect to residential development.

3.1 Housing Characteristics

This section of the housing element describes the characteristics of the existing housing supply, in terms of the physical conditions, numbers and types, tenure, and costs.

3.1.1 Existing Conditions

During the months of May and June 1989, a housing condition survey of the City of Hawaiian Gardens was conducted. This was a windshield survey taken from the public right-of-way. Surveyors tabulated findings on field maps based upon the observed exterior condition of the structures. Housing condition was evaluated with respect to five categories. The categories and survey standards are described below.

<u>CATEGORY</u>	<u>SURVEY STANDARDS</u>
"1" Fix-up, Painting,	General housing improvement needed including paint and minor repairs. Typically, improvements can be, and are usually, done by the property owner unless income, age, or other constraint make such repairs improbable.
"2" Minor to Moderate Repair	In addition to or in lieu of fix-up and painting repairs, this category includes moderate repairs (commonly roofing on a small structure). It is estimated that repairs could reach \$2,500 to \$3,000 and are usually performed by a contractor.
"3" Major Repairs	In addition to or in lieu of categories 1 and 2, this category of housing condition requires extensive repairs and/or renovation such as upgrading the electrical service, replacing plumbing, repairing damaged siding and roofing. These types of repairs can frequently have costs in excess of \$3,000. The services of a contractor are required.
"4" Beyond Repair	Beyond categories 1, 2, and 3, this housing condition category includes structures for which the costs of repair is estimated to exceed the value of the structure.
"5" Renovation in progress	Homes observed to be under repair at the time of the survey.

The survey of housing stock conditions conducted in 1989 reported on a total of 1,245 units which were in need of some form of repair. The balance of the housing stock, 2,276 dwelling units (65%), was found to be in good to excellent condition. The survey findings are summarized in Table 2.

3.1.2 Number and Types

According to the 1990 Census, there were 3,518 completed dwelling units in the City of Hawaiian Gardens. Of these 3,518 completed units, 3,395 were occupied at that time.

The breakdown of housing units in the City by type is presented in Table 3. The City exhibits a marked contrast of single family from multifamily units throughout the City, with specific areas predominated by either single family or multi-family units.

TABLE 2
1989 HOUSING CONDITIONS SURVEY

Category	No. of Units	Percent of Total
1	681	19.3
2	439	12.4
3	68	1.9
4	22	0.6
5	35	0.9

Source: U.S. Bureau of the Census, 1990.

TABLE 3
HOUSING TYPES

Characteristic	Number	Percent
1 Unit Detached	1,593	45.3
1 Unit Attached	429	12.2
2-4 Units	359	10.2
5-9 Units	241	6.9
10+ Units	594	16.9
Mobile Homes	252	7.2
Other	50	1.4
TOTAL:	3,518	

Source: U.S. Bureau of the Census, 1990.

3.1.3 Tenure

Tenure describes the mix of owner and renter occupied units within the City's housing stock. The 1990 U.S. Census reveals that the majority of households in Hawaiian Gardens are renters, constituting 1,860 or 55% of all occupied units, and owners make-up 45% of the households.

3.1.4 Housing Costs

Table 4, Monthly Housing Costs of Owners, and Table 5, Monthly Contract Rents, indicate the actual monthly costs incurred by owner and renter households in 1990. Additional information on median owner costs and rental rates has also been included. The median monthly housing costs for homeowners with a mortgage is \$928 per month. Half pay more than this and half pay less.

3.2 Population Characteristics

3.2.1 Growth

The City of Hawaiian Gardens was incorporated April 9, 1964. Population growth for the City since that time is summarized in the Table 6.

The most significant gains in population have occurred since 1986. The City has developed several significant residential projects which have accelerated the population growth beyond the Southern California Association Of Government's projected 2000 population of 10,859. The majority of this activity can be attributed to the establishment and implementation of the Housing Goals of the Hawaiian Gardens Redevelopment Agency. Due to the urbanized character of the City there remains relatively little undeveloped property for future development. Thus developers will be forced to acquire and develop currently developed properties. Based upon these assumptions and the history of the last five years one can assume an approximate 0.7% annual increase in residential units. If the population trends continue as they have been, this will account for an additional 370 persons in 123 new units by 1994. This would mean a total of 3,682 residential units within the City limits of Hawaiian Gardens.

3.2.2 Household Size

The 1990 U.S. Census indicates that the average household size in Hawaiian Gardens was 4.0 persons. While there were 4.28 persons average per rental unit, there were only 3.66 persons per owner-occupied unit. According to the Census, large households, those with 5 or more persons, represented almost 36% of all households, or 1,223 of the 3,395 total households in the City. Table 7 indicates the household sizes in the City.

TABLE 4
MONTHLY HOUSING COSTS OF OWNERS

Housing Cost	With a Mortgage		Without a Mortgage	
	Number	Percent	Number	Percent
Households Reported	837	75.7%	269	24.3%
Less than \$200	13	1.2%	189	17.1%
\$200 - \$299	48	4.3%	63	5.7%
\$300 - \$399	64	5.8%	17	1.5%
\$400 - \$499	32	2.9%	0	0%
\$500 - \$599	22	2.0%	0	0%
\$600 - \$699	101	9.1%	0	0%
\$700 - \$799	59	5.3%	0	0%
\$800 - \$899	57	5.2%	0	0%
\$900 - \$999	80	7.2%	0	0%
\$1,000 - \$1,249	253	22.9%	0	0%
\$1,250 or more	108	9.8%	0	0%
Median	\$928		\$150	

Source: U.S. Bureau of the Census, 1990.

TABLE 5
MONTHLY CONTRACT RENT

Monthly Rent	Number	Percent
Total Occupied Units	1,860	
Less than \$200	28	1.5
\$200 - \$249	22	1.2
\$250 - \$299	22	1.2
\$300 - \$349	83	4.5
\$350 - \$399	89	4.9
\$400 - \$449	227	12.4
\$450 - \$499	151	8.2
\$500 - \$549	166	9.1
\$550 - \$599	176	9.6
\$600 - \$649	186	10.1
\$650 - \$699	200	10.9
\$700 - \$749	177	9.7
\$750 - \$999	263	14.3
\$1,000 or more	15	0.8
No Cash Rent	28	1.5
Median Contract Rent	\$583	

Source: U.S. Bureau of the Census, 1990.

TABLE 6
CITY POPULATION TRENDS

Year	Population	Annual Percentage Gain
1960	8,811	
1970	9,052	2.7
1975	9,307	2.8
1980	10,548	13.3
1984	11,479	8.8
1985	11,601	1.1
1986	11,933	2.9
1987	12,083	1.3
1988	12,179	0.8
1990	13,639	12.0

Sources: U.S. Bureau of the Census; California Department of Finance, 1990.

TABLE 7
SIZE OF HOUSEHOLDS

Persons in Household	Number	Percentage of All Households
One	500	14.7
Two	610	18.0
Three	518	15.3
Four	544	16.0
Five	426	12.5
Six	290	8.5
Seven or More	507	14.9
Total Households	3,395	
Median Persons Per Unit		
All Units	4.00	
Renter Occupied	4.28	
Owner Occupied	3.66	

Source: U.S. Bureau of the Census, 1990.

3.2.3 Income

The ability to pay for housing is a function of income and the cost of housing. Beyond the ability to pay for shelter, income also affects the ability of an owner to maintain their housing in a condition which provides for a reasonable level of housing value appreciation. Maintaining the home not only benefits the homeowner, but it also benefits the neighborhood by virtue of the housing value appreciation. Conversely, a household that has less disposable income is less likely to invest in housing maintenance and repairs and in the long-term realizes a lower amount of housing value appreciation.

Therefore, it is important to recognize the ability of owners to maintain the housing stock in a community and when funds are available to provide housing assistance when and where it is needed. The Community Development Block Grant Program is one of several funding programs available to Hawaiian Gardens. Administration of the program is directed toward households of greatest need, namely very low income, low-income, and moderate-income households. Similarly, the Hawaiian Gardens Community Redevelopment Agency has a statutory responsibility to provide funding for programs to encourage development or retention of low- and moderate-income housing stock. These programs are discussed in detail in Section 5.2

The Los Angeles County area is the geographic basis for measuring income categories for HUD (Housing and Urban Development) and other housing programs. Hawaiian Gardens' 1989 median income of \$29,510 was approximately 84 percent of the 1989 median income of Los Angeles County, which was \$34,965. In 1992, the median income of Los Angeles County had risen to \$42,300.

Table 8, Income Ranges by Categories, and Table 9, Income Distribution, provide an overall perspective of the income distribution of Hawaiian Gardens' households relative to households throughout Los Angeles County.

TABLE 8
INCOME RANGES BY CATEGORIES
(1989)

Income Category	Percentage of Area Median Income	Income Range As Percent of \$34,965 County Median)
Very Low Income	Below 50%	Under \$17,482
Low Income	50% to 80%	\$17,483 to \$27,971
Middle Income	80% to 120%	\$27,972 to \$41,957
Upper Income	Over 120%	\$41,958 or more

Source: U.S. Bureau of the Census, 1990.

Table 9, Hawaiian Gardens Income Distribution, provides more detailed income data for the City.

TABLE 9
INCOME DISTRIBUTION

Income Group	Households	Percent
\$0 - \$9,999	516	14.9
\$10,000 - \$14,999	263	7.6
\$15,000 - \$19,999	308	8.9
\$20,000 - \$24,999	338	9.8
\$25,000 - \$29,999	341	9.8
\$30,000 - \$34,999	348	10.0
\$35,000 - \$39,999	241	7.0
\$40,000 - \$44,999	253	7.3
\$45,000 - or more	<u>855</u>	<u>24.7</u>
Households Reported	3,463	100%
Median Income	\$29,510	

Source: U.S. Bureau of the Census, 1990.

As indicated in Table 9, 51 percent of the households are under the median income. A summary of the housing and population characteristics is presented in Table 10, Housing Profile Summary. This information is utilized in establishing and modifying the criteria for housing goals, policies, and objectives, and for program implementation. Table 10 may reflect some differences in the unit counts from Table 9, because Table 9 is based upon fulltime, occupied units, and it does not include any second-home or vacant units.

TABLE 10
EXISTING HOUSING PROFILE SUMMARY

	Number	Percent
Total Units	3,518	
Occupied	3,395	96.5
Vacant	123	3.5
Owner-Occupied	1,535	45.2
Renter-Occupied	1,860	54.8
Overcrowded Units (1.01 person/room or more)	1,333	39.3
Large Households (5 or more persons)	1,223	36.0
Elderly (65 or older)	416	12.3

Source: U.S. Bureau of the Census; SCAG, 1990.

As of January 1, 1992, the California Department of Finance estimated that Hawaiian Gardens had 3,616 housing units, of which 1,590 were detached single family, 429 attached single family, 361 multiple (2-4) units, 985 multiple (5 plus) units, and 251 mobile homes. The State has also estimated that 3,495 units were occupied, with a vacancy rate of 3.35 percent.

3.3 Housing Needs

This section of the housing needs assessment provides an analysis and identification of the housing needs in Hawaiian Gardens. These needs are broken down into existing needs, future needs, and the needs of special households. Also included in this section is a discussion of opportunities for energy conservation in residential development.

3.3.1 Existing Needs

The Regional Housing Needs Assessment identifies Existing Need in terms of overpayment by lower income households. Overpayment is defined as rent or house payments that exceed 30 percent of income. Lower income households are those within the City that have incomes of less than 80 percent of the Los Angeles county's median household income.

Existing need is based on the concept of overpaying for housing, which is often cited as an indicator of housing assistance needs, since financial assistance is necessary to reduce costs to a manageable level. Not every household that pays a disproportionately high amount of their income toward rent or a house payment is considered in need of housing assistance. A household is defined as in need of assistance only if it meets the following income and payment criteria:

1. Has an annual income of 80 percent or less of the median income for Los Angeles County, and
2. Pays an inordinate share of that income (greater than 30 percent) toward a house payment or rent.

Households that earn 80 percent or less of the median income of the County are termed "lower income". Among the four income classes identified in the RHNA, they constitute the very low income (less than 50 percent of median), and low income (50-80 percent of median) categories. The households within these two categories that pay more than 30 percent of their income toward a shelter payment are the households that have an "existing" need for affordable shelter. This type of existing housing need is broken down by tenure type (owners and renters). The definition of existing need is not all inclusive. It does not count lower income households who do not pay an inordinate amount of their income for shelter, but live in substandard housing, nor does it include households who are homeless or live in overcrowded conditions.

3.3.1.1 Share of Regional Housing Needs

Pursuant to California Government Code Section 65584 (a), the Southern California Association of Governments (SCAG) is responsible for analyzing and identifying the projected housing needs of all income levels for each city in the Southern California Region, including the City of Hawaiian Gardens. The projected housing needs consider:

1. Market demand for housing;
2. Employment opportunities in and around the City;
3. Availability of suitable sites;
4. Availability of public facilities;
5. Commuting patterns;
6. Type and tenure of housing needs;
7. Housing needs of farm workers.

It must be noted that Hawaiian Gardens is approximately one square mile in area and is fully developed. Without the demolition of existing residential opportunities and increases in density, the City can not reasonably accommodate many more residential units.

According to the RHNA, 192 (28%) low income renters and 481 (71%) very low income renter households are overpaying for housing, and 47 (30%) low income homeowners and 108 (69%) very low income homeowner households are overpaying for housing. SCAG's assessment of the City's existing housing needs with regard to lower income homeowners and renters is presented in Table 11. According to the 1990 Census, 837 low and moderate income renter households (to \$35,000/year) are overpaying for housing, and 277 owner occupied low and moderate income households are overpaying for housing.

TABLE 11
EXISTING HOUSING NEEDS
BY INCOME AND TENURE

Income Category	Owner	Renter	Total
Very Low	108	481	589
Low	<u>47</u>	<u>192</u>	<u>239</u>
TOTAL:	155	673	828

Note: SCAG Existing Need numbers do not add up precisely.

Source: SCAG Revised Regional Housing Needs Assessment, December 1988.

3.3.2 Future Needs

Future housing need refers to the number of additional housing units, by income level, that should be added to each locality's housing stock inventory. According to SCAG:

"Identification of Future Need for the higher income levels gives each jurisdiction an estimate of effective demand, or how much demand for housing there will be in the locality; as a function of market forces. Future Need at the lower income levels is often largely latent demand, since such income levels, without subsidy or other assistance, are often ineffective in causing housing to be supplied."

State law requires that, in allocating future need by income level, further "impaction", or concentration of lower income households, should be avoided; and localities with a higher proportion of lower income households than the region generally are considered to be impacted. According to the background information published by SCAG regarding the

- .. 1988 RHNA, the RHNA addresses the issue of impactation by reducing lower income household allocations and increasing moderate and upper income household allocations to impacted cities, and distributing to the non-impacted localities these additional lower income households and reductions in moderate and upper income households.

The assessment of future housing need covers the period from July 1, 1989 to June 30, 1994. For this period, SCAG allocated to Hawaiian Gardens a future housing need of 488 households. In addition, the State Department of Housing and Community Development has informed SCAG that localities must account for the future housing needs that occurred during the period from January 1, 1988 to June 30, 1989. SCAG has prepared future housing needs allocations for this "gap" period, and assigned 137 households to the City. These "gap" allocations should be allocated by the City by income level, in a manner consistent with the proportions of the 1989-1994 future needs assigned to each income level. Table 12 indicates the future housing need, by income level, allocated to Hawaiian Gardens by SCAG, including the "gap" allocation and new construction since 1989. This includes a 100-unit development for senior citizens, which required that 50% of the total dwelling units be made available to low and moderate income senior citizens.

TABLE 12
FUTURE HOUSING NEEDS BY INCOME LEVEL
(July 1989 - June 1994)

Income Category	RHNA 12/88	New Construction 7/89-Present	Adjusted Need	Percentage of Total
Very Low	70	-	70	16.7%
Low	96	50	46	10.9%
Moderate	147	50	97	23.1%
Upper	<u>207</u>	-	<u>207</u>	49.4%
TOTAL:	520		420	

Source: SCAG Revised Regional Housing Needs Assessment, December 1988

Chapter 5 of this Element sets forth goals, policies, quantified objectives and programs that address these determinations of housing need in Hawaiian Gardens.

3.3.3 Special Housing Needs

Pursuant to the Housing Element Legislation, a housing element must include an analysis of special housing needs. That is to say the needs of such groups as the disabled, elderly, large families and overcrowded households, families with female heads of households, and farmworkers. Additionally, a discussion of persons and families in need of emergency shelter must also be included.

3.3.3.1 Disabled Households

The Census Department reports that there are a number of handicapped persons in Hawaiian Gardens, based upon those with work disabilities and those with mobility or self-care limitations. The housing needs of the handicapped vary with the type and severity of the particular handicap, and not all handicapped persons require specialized housing consideration. While the needs of certain handicapped individuals (blind, deaf or experiencing nervous disabilities) may be met without special housing accommodations, non-ambulatory persons with handicaps who require wheel chairs often need specially designed, barrier free housing. Some, but not all, handicapped persons also need housing assistance of a financial nature. Table 13 identifies the types and numbers of handicapped persons in the City.

A unique program available to Hawaiian Garden's residents with disabilities is the Disabled Resources Center, Inc. (DRC). The agency's goals and principles are to help people with disabilities attain their optimum level of independence in the community. With offices in Long Beach and Lakewood, the DRC evolved from providing information and referral to its current programs for independent living. DRC's housing programs include accessible housing referrals, housing search skills training, landlord-tenant relations, and housing benefits information and referral.

3.3.3.2 Elderly Persons

Table 14, Population Distribution by Age and Sex, presents data by gender and age for the City of Hawaiian Gardens. It indicates that 655 persons or 4.8 percent of the City's population is 65 years of age or over. Those persons between 55 and 64 represent an additional 631 persons.

Typically senior citizens have fixed incomes and, therefore, experience difficulty in maintaining adequate living arrangements due to increased rental costs. Senior citizen homeowners are still subject to increasing utility rates and increased costs for property maintenance. Frequently, many senior citizens who would choose to own cannot find an adequate choice of housing and, therefore, either rent, purchase housing unsuitable to their needs, or relocate to other areas.

In 1990, Hawaiian Gardens built a 100 unit senior citizen complex located on West 226th Street. This helped to alleviate many of the housing needs of senior citizens in Hawaiian Gardens. The elderly population is growing, and housing markets should reflect this trend. As previously mentioned, some of the residential projects constructed in the last five years in Hawaiian Gardens are reflective of the needs of this population. The special needs of this population group can also be addressed by smaller homes, second units on lots with existing homes, and subsidies.

TABLE 13
DISABLED PERSONS

	Persons
Total Persons in Labor Force	6,123
Persons with Work Disabilities	835
- prevented from working	587
Not in Labor Force	3,127
Persons with Mobility Limitation Only	644
Persons with Self-Care Limitation Only	331
Persons with Mobility & Self-Care Limitation	144
Persons with No Mobility/Self-Care Limitations	8,048

Source: U.S. Bureau of the Census, 1990.

TABLE 14
POPULATION DISTRIBUTION BY AGE AND SEX

Age	Male Persons	Female Persons	All Persons
Under 5	751	822	1,573
5 - 17	1,740	1,495	3,235
18 - 24	1,173	897	2,070
25 - 44	2,392	2,124	4,516
45 - 64	748	842	1,590
65 +	274	381	655
TOTAL:	7,078	6,561	13,639
Percent of Total	51.9%	48.1%	
Median Ages	24.2	25.5	24.8

Source: U.S. Bureau of the Census, 1990.

3.3.3.3 Large Families

Large families, those with five or more persons, frequently experience a greater incidence of overcrowding due to the large family size as well as the unavailability of housing units in the City to accommodate large families. According to the last Census, the average family size is 4.29 persons, and large families (with 5 or more persons), represent 44 percent of all family households, or 1,204 of the 2,813 family households in Hawaiian Gardens. The distribution of large families throughout Hawaiian Gardens is summarized in Table 15.

3.3.3.4 Overcrowded Households

An overcrowded household is typically the result of a shortage of space. Specifically, overcrowding occurs when there are more than 1.01 persons per room (excluding bathrooms, storage areas, and hallways or stairways). According to the latest Census figures, there were 1,333 overcrowded households in the City of Hawaiian Gardens. Of these 471, or 31 percent were owner-occupied, overcrowded units, and 862, or 46 percent were renter-occupied, overcrowded units.

TABLE 15
LARGE FAMILIES

Family Size	No. of Families
Five members	420
Six members	282
Seven or more members	502
TOTAL:	1,204
Percent of All Families	44%

Source: U.S. Bureau of the Census, 1990.

While overcrowding typically implies the need to enlarge existing residences with building additions, the high percentage of renter occupied units would indicate a need to increase the basic supply of large residential units through new construction.

3.3.3.5 Female-Headed Households

At the time of the 1990 Census, Hawaiian Gardens had 934 female-headed households. Of these 934 households, 600 (or 64 percent) were female householders of families. Single-parent households are subject to special housing problems, because such households are frequently in a lower income range, particularly when the single parent is female. Since female-headed households with dependent children generally tend to have low incomes, their special housing needs can be addressed through housing subsidy and rental assistance programs. In addition, affordable child care and after-school care are needed by many families with dependent children that are headed by females.

3.3.3.6 Farmworkers

Because of the extensive amount of agricultural activity throughout the State, housing element statutes require that there be a section discussing the housing needs of farm workers. According to the 1990 Census, only 189 persons, or 3.7 percent of the work force in Hawaiian Gardens were employed in agriculture, forestry and farming. While there are no agricultural operations in Hawaiian Gardens, adjacent communities do have agricultural related industries (packaging, shipping and processing operations) which would require "farm worker" housing. However, because of the urbanized nature of Hawaiian Gardens

and the surrounding communities, it is unlikely that "farm worker" housing could be provided. There are no direct agricultural operations within a fifteen mile radius of Hawaiian Gardens. In this instance the provision of "farm worker" housing would appear to be unnecessary.

3.3.3.7 Small Group Home and/or Hospice Needs

With recent medical challenges growing in the entire county area Hawaiian Gardens is concerned about the housing needs of those individuals who need some limited assistance but do not warrant full hospitalization. Toward that end, the State adopted regulations permitting small group homes for up to six individuals within single family residential zones. Hawaiian Gardens revised its zoning regulations in October, 1989 to incorporate such provisions.

3.3.3.8 Families and Persons in Need of Emergency Shelter

In 1984, the State Housing Element law was amended to add "families and persons in need of emergency shelter" to the special housing needs groups to be considered in each locality's housing element. However, by their very nature, homeless persons and families are difficult to quantify, and their special housing needs are as varied as their individual circumstances. For example, a survey conducted by SCAG in 1987 to determine the sub-groups comprising the homeless in the region elicited information from cities and counties in the SCAG jurisdiction for each of the sub-groups named. The survey results are indicated in Table 16. The data in Table 16 should not be relied upon as definitive, in that over one-half of the respondents did not provide estimates of subgroups of their estimated homeless population.

Nationwide, homelessness has become an increasingly recognized problem, and it is generally conceded that the homeless problem is both increasing and changing from the traditional image of the indigent, transient single male. Factors thought to contribute to this increase in the number of homeless include increasing housing costs, an increase in the size of the population with incomes below the poverty line, reductions in federal and state subsidies to lower income persons, and changes in the law regarding the treatment of the mentally ill and those suffering from chronic alcoholism and substance abuse.

TABLE 16
HOMELESS SUB-GROUPS

Sub-Group	Percentage	Survey Responses
Veterans	16.2	19
Elderly	10.1	23
Single Persons	63.3	37
Persons in Families	21.8	38
Mentally Ill	29.1	29
Alcohol Abusers	40.8	33
Substance Abusers	26.9	28
Children	16.4	30

Source: SCAG Revised RHNA, December 1988.

Accurate data regarding homeless persons in Hawaiian Gardens is presently not available. In 1984, the U.S. Department of Housing and Urban Development (HUD), conducted a comprehensive study of the nation's homeless. For a medium-sized city, the study estimates there are 12 homeless persons for every 10,000 persons. Using 1990 Census data, and applying the HUD ratio, it can be estimated that 16 homeless persons reside in Hawaiian Gardens. However, the HUD study also found that 31 percent of the nation's homeless are living in the western region of the country, while only 19 percent of the nation's total population lives in this region. To adjust the above estimate to reflect this disproportionate share of homelessness, the ratio of 12 homeless persons per 10,000 population is multiplied by the ratio of the share of total homeless to the share of the total population for the western region. This results in an adjusted estimate of 19.6 homeless persons per 10,000 population. Assuming that it is appropriate to extrapolate the study's numbers to Hawaiian Gardens, there would be an estimated total of 27 homeless persons within the City.

The special housing needs of the homeless include permanent, affordable and decent shelter, and may also include food and supplemental social services, such as health care, child care, housing search assistance, and employment skills training. Given the lack of any definitive data regarding the number of homeless persons within the City, any estimates of their specific needs would be speculation.

There are a number of private, non-profit social service agencies located in the vicinity of Hawaiian Gardens that provide services to homeless persons and families. These include the following:

1. Rio Hondo, located at 12300 Fourth Street, in Norwalk;
2. Hospitality House, at 7950 Pickering, in Whittier;
3. The Long Beach Rescue Mission, located in Long Beach, with 133 shelter spaces and serves single men (Samaritan House) and single women (Lydia House);
4. The Catholic Charities Family Shelter, located in Long Beach, has a capacity for 60 spaces and provides emergency shelter for families, elderly and disabled;
5. The Salvation Army, located in Long Beach, has a capacity of 70 shelter spaces and serves single men and women;
6. South Bay Alcoholism Services, located in Long Beach, has 15 shelter spaces and serves alcoholic women.

In addition, a number of county-wide agencies provided services to the homeless, including the Salvation Army, which provides temporary emergency shelter, food and housing referrals. The City is served by the Rapid Transit District, with connection to the Muni Light Rail and the Long Beach Municipal Transit. These public transportation systems provide low-cost transportation services throughout Los Angeles County.

The City's inability to quantify any homeless population suggests that existing social service providers - both in the vicinity of Hawaiian Gardens and elsewhere in Los Angeles County, are providing adequate shelter and other services to meet the needs of persons and families in need of emergency shelter in the City. However, the very nature of homelessness prevents any such definitive determinations. While both the problems and the solutions are regional, if not national, in scope, the City's Housing Element addresses the special housing needs of the homeless, and sets forth a program to investigate the feasibility of developing a "single room Occupancy" facility to provide shelter to persons and families in need of emergency shelter.

3.3.4 Energy Conservation

California Government Code Section 65583(a)(7) indicates that housing elements shall include an analysis of opportunities for energy conservation with respect to residential development.

In 1974, the California Legislature created the California Energy Commission to deal with the issue of energy conservation. The Commission adopted conservation standards and guidelines which have been incorporated into the Uniform Building Code for new construction. These standards apply to all new construction and to major remodeling of existing structures. Basically these standards indicated the insulation and design requirements for walls, ceilings and floors of all habitable spaces.

In relation to new residential construction the energy efficient design standards do add to the initial development costs. However, over time the savings on cost and consumption of energy should result in lower overall housing costs. Since utility costs are among the highest ongoing, components of housing costs these savings in energy costs should have a long term affect of creating more affordable housing costs in the future.

Opportunities for additional energy savings are incorporated within the guidelines prepared by the California Energy Commission. Additionally, existing structures can be retrofitted with a variety of energy saving devices to conserve both energy and water.

3.4 Units at Risk

The City of Hawaiian Gardens does not have any units listed in the "1990 Inventory of Federally Subsidized Rental Units at Risk of Conversion", nor in subsequent updated information made available by the division of Housing Policy Development of the State Department of Housing and Community Development. The City has not used Community Development Block Grant (CDBG) or redevelopment funds for multi-family rental units. The City is not located in a qualifying rural Farm Housing Authority area and no bond financed units are eligible to terminate affordability controls within the next ten years according to the 1990 "Annual Summary: The Use of Housing Revenue Bond Proceeds", prepared by the California Debt Advisory Commission. The City has not had an in-lieu fee or inclusionary program and no projects have been approved pursuant to Section 65916 of the Government Code.

4.0 RESOURCES AND CONSTRAINTS

This section will include the following:

1. Analysis of existing and potential sites for housing of all types in the jurisdiction (including the availability of infrastructure);
2. An inventory of land suitable for residential development, including vacant sites and sites having potential for redevelopment, and an analysis of the relationship of zoning and public facilities and services to these sites;
3. Analysis of potential and actual non-governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the availability of financing, the price of land, and cost of construction; and
4. Analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including land use controls, building codes, and their enforcement, site improvements, fees and other exactions required for developers, and local processing and permit procedures.

4.1 Land Inventory

4.1.1 Vacant and Underused Land

There exists little vacant land in the City of Hawaiian Gardens which is zoned for residential use. The new construction which has taken place in the last five years has effectively reused the majority of the land that was previously identified as underutilized. For practical purposes, there is no vacant land available for new residential development.

4.1.2 New Housing Supply

New housing construction in Hawaiian Gardens during the past several years has been predominantly higher density units such as multiple family apartments and condominiums. This is due in part to assistance provided by the City and the Redevelopment Agency through the SB-99 Mortgage Revenue Bond program. Additionally it should be noted that the General Plan Land Use Map and the zoning regulations provide for higher densities than currently exist in the single family neighborhoods that comprise Hawaiian Gardens. This provides an economic incentive for property owners to recycle properties with older structures into higher density developments.

4.2 Governmental Constraints

Local housing elements, pursuant to Article 10.6, must analyze potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels. The categories of constraints required in the analysis are as follows:

1. Land Use Controls;
2. Building Codes and Enforcement;
3. Site Improvements;

4. Fees and Other Exactions;
5. Local Processing and Permit Procedures;
6. Availability of Financing; and
7. Price of Land and Cost of Construction.

4.2.1 Land Use Controls

The Land Use Element of the General Plan establishes the principal residential land use categories to be developed in the community. The Zoning Code establishes the regulations affecting the uses, density, and size of housing permitted in different sectors of the City.

The Hawaiian Gardens General Plan is comprised of the seven General Plan Elements required by State Law. The Land Use Element establishes the basic land use policies for the City. Density provisions for residential use are directly linked to the City Zoning Ordinance, and together they provide the basis for residential development in the City.

The General Plan establishes three residential use categories comprising 62 percent of the land use designations of the City. The permitted densities, respective implementation zoning, and acreage allocations are described in Table 17. Based upon this information, the City has a maximum development potential of 5,037 dwelling units. That is 1,519 more units than the existing 3,518 units as identified in the 1990 Census. However, it should be noted that this maximum development potential is based upon acreage considerations. Existing lot designs, street configurations, infrastructure development standards, existing developments, and land pricing are factors which limit the ability of a developer in achieving the maximum development densities which may be prescribed by the General Plan or Zoning Ordinance.

The City of Hawaiian Gardens implements the Land Use Element of the General Plan by means of its zoning authority. The Zoning Map and Ordinance classify approximately 280.8 acres throughout the City for residential purposes in accordance with the information contained in Table 18, Zoning Summary.

Currently available development opportunities exist as follows:

1. South of Carson and West of Norwalk Boulevard is a single-family neighborhood that is currently zoned R-2. The design and development standards for the R-2 zone sets the maximum density at 17 units per acre, with multi-family (4 units) lot sizes a minimum of 10,000 square feet. The City recently reduced the minimum lot size requirement from 5,000 s.f. to 3,750 s.f. to enable development on substandard (25') lots. Building height is restricted to a maximum of 3 stories, and front, side and rear yard setbacks are 20, 5, and 10 feet, respectively. This area currently supports 113 multi-unit parcels, and is capable of supporting at least 429 additional units. Approximately 600 feet of sewer and 1,500 feet of water main will be required to support all 429 units.
2. South of 221st Street and east of Norwalk Boulevard is a single-family neighborhood that is currently zoned R-2. Refer to the description above regarding development standards for the R-2 zone. This area currently supports 141 multi-unit parcels and is capable of supporting at least 183 additional units. Approximately 600 feet of sewer and 1,900 feet of water mains are necessary to serve the development.

TABLE 17
GENERAL PLAN
RESIDENTIAL LAND USE DESIGNATIONS

Land Use Designation	Implementing Zoning	Maximum Density (units/acre)	Net Acreage	Maximum Housing Unit Yield
Single Family Low Density	A-1, R-1	8.4	29.0	243
Multiple Family Medium Density	R-2	17	156.5	2,660
High Density	R-3, R-4	24	78.3	1,879
Mobile Home Park	MHP	15	<u>17.0</u>	<u>255</u>
TOTAL:			280.8	5,037

Source: Hawaiian Gardens General Plan Land Use Map, 1992.

TABLE 18
ZONING DESIGNATIONS

Zoning	Use	Acreage
A-1	Light Agriculture	11.6
R-1	Single Family	17.4
R-2	Multi-Family, Medium Density	156.5
R-3	Multi-Family, High Density	23.5
R-4	Multi-Family, High Density	54.8
MHP	Mobile Home Park	<u>17.0</u>
TOTAL:		280.8

Source: Hawaiian Gardens Zoning Ordinance and Map, 1989.

3. East of Norwalk Boulevard between Carson Street and 221st Street is an area that is transitioning from high density and single-family density to all high density. Approximately nine acres that are zoned R-2 are available for assembly and development of about 180 units. The design and development standards for the R-3 and R-4 high density zones allow for a variety of multi-family residential uses, including apartments, townhomes and condominiums. The maximum density allowed is 24 units per acre, on a minimum lot of 7,500 square feet. Front, side, and rear yard setbacks are 20, 5 and 10 feet, respectively, and the maximum building height is 35 feet or 3 stories. Approximately 1,800 feet of water main and 1,200 feet of sewer main are required to serve this development.
4. North of Carson Street is capable of supporting at least 67 new units in areas presently zoned R-2, R-3 and C-4. No capital improvements are necessary to support this area, however, approximately 2,500 feet of water main is required to adequately complete the water system.
5. South of Carson Street, between Verne and Hawaiian Avenues, the City will assist in transitioning an area from low density residential (R-1) use to multi-family (R-4) use. This will allow development of 15 "townhome-style" units. As part of this transition, infrastructure improvements will be necessary, including street widening and sewer system upgrades.

As described herein, land use controls are not considered a constraint to development of multi-family residences in the City. The R-2, R-3 and R-4 zoning designations allow the development of multi-family units, which is permitted by right. Recent actions by the City include reducing lot size requirements for substandard (25') lots in an R-2 zone, increasing the maximum density of R-2 zoned properties in this area to 24 units per acre. In addition, the City is purchasing lots for the purpose of consolidation. These actions are further evidence of the City's efforts to remove development constraints for multi-family residences.

4.2.2 Site Improvements

Developers of residential subdivisions in Hawaiian Gardens are required to install streets, curbs, gutters, sidewalks, sewers, water lines, street lighting, and trees in the public right-of-way within and adjacent to a subdivision. These facilities are then dedicated to the City, which is responsible for maintenance. Construction of these offsite improvements vary, but are estimated to be about \$145.00 per lineal foot. The General Plan Update includes a Capital Improvement Element which indicates sources of funds. Refer to this Element for a complete discussion of infrastructure needs and costs.

Funds for capital projects include Federal, State, local, recreation, water and electric utility sources. Federal sources may include Community Development Block Grants (\$280,000/year), Federal Aid Urban, Federal Demonstration Projects and Revenue Sharing. State funds may include, but are not limited to, Arterial Highway Funds, SB 821 Grants, State Gas Tax, State Demonstration Projects, and State Park Bonds. Local funds may include, but are not limited to, the General Fund, sale of land, park development charges, and Redevelopment and other local funds. Water and electrical utility funds may include construction bonds and Rule 21 Funds. Presently, Rule 21 Funds are being used to fund undergrounding of electrical transmission lines on Norwalk Boulevard. Although more costly than above-ground lines, provision of these funding sources will mitigate, to the extent feasible, site improvement constraints to future development in this area of the City.

4.2.3 Building Codes and Enforcement

Hawaiian Gardens has adopted the Los Angeles County Building Code, which is almost identical to the Uniform Building Code. The Los Angeles County Building Code does not impose any housing standards greater than those contained in the Uniform Building Code. Therefore, Hawaiian Gardens cannot reduce construction costs by revising its building code requirements.

4.2.4 Fees and Exactions

Various fees are charged by the City of Hawaiian Gardens, the County Sanitation Districts of Los Angeles County, and the school district, for the provision of services such as environmental review, permit processing and delivery of sanitation services and water. The Sanitation Districts' connection fees are based on the type of land use and size, and range from \$700 per multi-family dwelling unit (condominium or 5+ units) to \$2,700 per parcel of a four plex. The City and County fees for permit review and processing are indicated on Table 19. These fees are fairly uniform and standard throughout the surrounding communities. They are not, therefore, considered to be a development constraint.

4.2.5 Local Processing and Permit Procedures

The City of Hawaiian Gardens processes Planning and Building applications in accordance with State Law and within the time frames specified by existing laws and are not considered a constraint to development. Multi-family development (excluding condominiums) is subject to ministerial approval, which requires only a building permit. The City Planning staff conducts design review, and forwards the proposal to the Planning Commission for their review and recommendation for approval by the City Council. Planning Commission meetings have recently been increased to twice per month, to expedite the review process. If a proposal does not include an addition to the floor area, the plan can be approved by the Planning Department. Typically, plot plan review requires 1-2 weeks, and the building department plan check requires 2-3 weeks.

A Conditional Use Permit (C.U.P.) presently takes approximately two months to process, formerly it required four months for processing when the Planning Commission met only one time per month. The permit process was further expedited through elimination of a design review committee, which is now handled by the Planning Department. The requirements for variances have also been revised, and have been relaxed in relation to non-conforming uses. In fact, substantially fewer variances were processed in 1992 (2) compared to 28 in 1991.

4.2.6 Availability of Financing

The City of Hawaiian Gardens, like all other cities, is limited in its ability to provide housing programs based upon the availability of funding from outside sources. Federal and State programs which have flourished in the past are subject to annual fluctuations based upon decisions which are beyond the City's control. Hawaiian Gardens cannot commit to continued availability of such programs based upon Federal or State funding. Furthermore, State initiatives which limit City revenues have been subject to substantial changes in recent years. Recently, the State has been diverting Redevelopment and City funds to education accounts. This has an adverse impact on housing and jobs. As tax revenues to the City are diminished, so too is the City's ability to offer housing programs. The State should act to mitigate this constraint on development in the City.

TABLE 19
PERMIT AND PROCESSING FEES

DIVISION OF LAND

1.	Subdivisions (Tract Maps, Condominium Maps)		
	a) Tentative Map:	\$1,300	plus \$25/parcel
	b) Final Map:	\$ 800	
2.	Parcel Maps		
	a) Tentative Map:	\$1,200	plus \$25/parcel
	b) Final Map:	\$ 800	
3.	Certificate of Compliance	\$ 400	plus \$25/parcel
4.	Tax Clearance Processing	\$ 400	
5.	Parcel Map Waiver	\$ 400	plus \$25/parcel
6.	Map Extensions	\$ 150	
7.	Document Review (i.e., CC&R's)	\$ 400	

BUILDING & SAFETY

1. Building Permits
 - a) L.A. County Title 26 * 2.35
2. Electrical Permits
 - a) L.A. County Title 27 * 2.35
3. Plumbing Permits
 - a) L.A. County Title 28 *2.35
4. Mechanical Permits
 - a) L.A. County Title 29 * 2.35

LAND USE

1.	Conditional Use Permit	\$ 475
2.	Variance	
	a) Commercial/Industrial:	\$ 475
	b) Residential:	\$ 400
3.	Minor Exception	\$ 225
4.	Zone Change	\$ 575
5.	General Plan Amendment	\$ 775
6.	Specific Plan	\$ 575
7.	CUP/VAR Extension	\$ 150
8.	Home Occupation Permit	\$ 30
9.	Classification of Use	\$ 60

TABLE 19 (P. 2)
PERMIT AND PROCESSING FEES

DEVELOPMENT REVIEW

1. Plot Plan Review
 - a) \$100 deposit (to be applied to Building & Safety fees)
2. Landscape Permit and Plan Check and Inspection
 - a) Landscape Permit Fees Up to One Acre (Based on area to be landscaped)
 - 1) up to 2,500 square feet \$ 60
 - 2) 2,500 to 7,500 square feet \$ 120
 - 3) 7,501 to 15,000 square feet \$ 180
 - 4) 15,001 to 30,000 square feet \$ 360
 - 5) 30,001 square feet to one acre \$ 440
 - b) Landscape Plan Check Fee Up to One Acre (Based on area to be landscaped)
 - 1) up to 2,500 square feet \$ 100
 - 2) 2,500 to 7,500 square feet \$ 300
 - 3) 7,501 to 15,000 square feet \$ 360
 - 4) 15,001 to 30,000 square feet \$ 420
 - 5) 30,001 square feet to one acre \$ 480
3. Temporary Use Permit \$ 50

ENVIRONMENTAL REVIEW

1. Environmental Review:
 - a) Categorical Exemption: \$ 50
 - b) Negative Declaration:
 - 1) De Minimis Project (AB 3158) \$ 100
 - 2) Non De Minimis Project: \$1,350
 - 3) Mitigation Monitoring Program: \$ 150
 - 4) Environmental Impact Report (EIR)
 - a. Review: \$500 deposit; work to be billed at Hawaiian Gardens hourly time and materials rates. Payment required on monthly basis.
 - b. Recording: \$ 850
 - c. Monitoring: \$ 250

OTHER PROFESSIONAL SERVICES

1. Consultation (Planning and Engineering)
 - a) First 3 hrs: No Fee
 - b) After 3 hrs: Billed for hourly time and material rates and to be paid monthly.
2. Zoning Conformance and Certification Report \$ 100/parcel

Source: City of Hawaiian Gardens, 1992.

4.2.7 Price of Land and Cost of Construction

The potential non-governmental constraints included within the provisions of the State Housing Element guidelines include issues of land costs, construction costs and capital improvements costs. Analysis of these issues can shed light on the private market forces which affect housing availability/affordability, and the potential impacts on goals regarding affordability levels and the number of households to be assisted. Additionally, depending upon the extent of housing availability/affordability, this information can signal the public sector as to the need to adjust land use, zoning, and housing policies. Presently, vacant land zoned R-2 is estimated to cost \$11 per square foot. Improved land ranges from \$49-\$54 per square foot. The City Redevelopment Agency is attempting to reduce the cost of land and the cost of housing by using its Twenty Percent Low and Moderate Income Funds, and other funds (approximately \$3,000,000) to create additional below market housing.

5.0 GOALS, POLICIES, AND QUANTIFIED OBJECTIVES

Housing programs are intended to further detail the City of Hawaiian Gardens' commitment to assure the continued maintenance, improvement and development of housing within the City. This section provides specific details which will aid in the implementation of the City's housing programs. A description is provided for each implementation measure. Program information is also intended to show the City's commitment to maintain, improve and develop housing in the community through a "good faith, diligent effort" as required by State Housing Law (Government Code Section 65583(c)).

Each housing program is described in the following detail:

- Brief statement of program, including specific City actions which will be taken to implement the program;
- City Agency or department responsible for implementation;
- Financing or funding source;
- Quantified objectives (where possible); and;
- Schedule for implementation.

GOAL 1

The provision of decent and adequate housing for all existing residents, and for those who choose to become residents of Hawaiian Gardens, regardless of age, sex, marital status, ethnic background, religion, income, or other arbitrary factors.

Policies

- 1.1 Review the General Plan and zoning map on an annual basis to monitor the availability of suitable vacant or underutilized land to accommodate a variety of housing types in the City.
- 1.2 Require that development proposals include provisions to meet housing needs and programs as set forth in the Housing Element.
- 1.3 Require that new housing construction and rehabilitation be designed to accommodate the special housing needs of the City for handicapped, elderly, large family, overcrowded, and/or female headed households.
- 1.4 Use the Land Use Element of the General Plan and the zoning ordinance to provide adequate sites for a variety of housing types, while ensuring that environmental, public infrastructure and traffic constraints are adequately addressed.
- 1.5 Where appropriate, encourage the redesignation of vacant or under-utilized non-residential lands to residential use, with allowable densities to facilitate the development of a variety of housing types to meet the existing and projected needs of all economic segments of the City.

- 1.6 Promote Fair Housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin or color.
- 1.7 Encourage the recycling of under-utilized residential land, where such recycling is consistent with established land use plans.
- 1.8 Pursue the acquisition of substandard units and assembly of land for development of new residential units.

Programs/Quantified Objectives

1.1.1 Acquisition of Substandard Units

This program will include the acquisition of substandard homes that are for sale, the clearance of the home, and the construction of new single-family homes for sale to residents or those choosing to live in the City. Units will be acquired by negotiation, pursuant to the requirements of the California Redevelopment Law. Approximately 20 low/moderate homes will be acquired over the next three years.

Responsible Agency:	Redevelopment Agency
Financing Sources:	Redevelopment tax increment funds
Time Frame:	Annual

1.1.2 Emergency Shelter

Investigate the feasibility of coordinating with other governmental entities, non-profit agencies and private enterprise, for the purpose of acquiring and retrofitting an existing structure for use as "single room occupancy" housing facility for the homeless and persons in need of emergency shelter. If determined to be feasible, creation of up to 20 single room dwelling units providing housing to persons who are homeless and/or in need of temporary or emergency shelter.

Responsible Agency:	Community Development Department, Redevelopment Agency
Financing Sources:	Redevelopment tax increment funds, potential Federal, State and County funding
Time Frame:	1993-1994

1.1.3 Land Assembly/New Development

This program will include, as necessary, the acquisition and assembly of land, relocation of residents, demolition of existing units, and the construction of new single-family owner-occupied units, for all economic groups. The program will be conducted pursuant to all requirements of the California Redevelopment Law, within the jurisdiction of the Redevelopment Agency. Approximately 100 new units will be constructed and at least half will be for low and moderate income families. For renters who cannot afford homeownership, multi-family development is permitted by right, and only a building permit is required.

New single-family homes will also meet the needs of existing renters because the City desires to make homeowners out of existing renters. The present owner/renter ratio is 45.2/54.8. The City's objective is to improve the stability of the community. In addition, in order to allow more efficient use of the City's limited resources for assisting new housing, the City will reduce the minimum lot size requirements in the High Density Zone.

Responsible Agency:	Community Development Department, Redevelopment Agency
Financing Sources:	Redevelopment tax increment funds, potential Federal, State and County funding
Time Frame:	1993-1996

1.1.4 Fair Housing

The City has a contract with the Fair Housing Foundation of Long Beach. The City keeps Fair Housing Publications at the Public Counter in City Hall. During 1994-95, the City will discuss contract modifications with the Foundation concerning outreach services and individual testing.

Responsible Agency:	City of Hawaiian Gardens
Financing Sources:	Federal Community Development Block Grants
Time Frame:	1993-1998+

GOAL 2

Improve the housing quality of the existing housing stock through housing rehabilitation assistance and enforcement procedures.

Policies

- 2.1 The City of Hawaiian Gardens will strive to remove any units identified as being unsafe and dilapidated and replace such units on a unit for unit basis.
- 2.2 The City will continue to provide rehabilitation assistance through available Federal grant programs and Redevelopment Agency monies to assure that the existing housing stock is adequately maintained.
- 2.3 The City, through its rehabilitation and improvement assistance programs will encourage housing additions to reduce overcrowding conditions; and modifications to accommodate the elderly and the disabled.

Programs/Quantified Objectives

The housing condition survey identifies a continued need for a housing rehabilitation program due to the fact that there are dwelling units found to be in need of both minor and major repairs.

The City of Hawaiian Gardens participates in the Federal Community Development Block Grant (CDBG) and Small Cities Programs, and has consistently appropriated funds for housing rehabilitation purposes. The City's housing rehabilitation programs have provided below market interest rate loans, rebates to homeowners, and small grants for housing improvements. Approximately 30 units per year will be rehabilitated.

2.1.1 The City Beautification Program

This program incorporates handyman assistance and code enforcement for substandard units. The City will provide assistance to single family and multi-family residents to facilitate minor repairs to existing units, limited to repairs that do not require building permits. The program also incorporates code enforcement to monitor the rehabilitation efforts. Assistance will be provided to 20 homes in 1993 with \$66,000.

Responsible Agency:	Community Development Department
Financing Source:	Federal Community Development Block Grants
Time Frame:	Annual

2.1.2 Rehabilitation Assistance for Multi-Family Units

Community Development Block Grant Funds will be used to rehabilitate 36 multi-family units over the next three years (\$100,000/year).

Responsible Agency:	Redevelopment Agency
Financing Source:	Federal Community Development Block Grants
Time Frame:	1993-1996

2.1.3 Rehabilitation of Single-Family Homes

The City will utilize Federal funding sources (CDBG) to assist in the rehabilitation of 25 single-family homes per year over the next three years (\$150,000 year).

Responsible Agency:	Community Development Department
Financing sources:	Federal Community Development Block Grants
Time Frame:	1993-1996

2.1.4 Redevelopment of Single-Family Substandard Units

This program will include the acquisition of single-family substandard units suitable for rehabilitation. Rehabilitation will be conducted similar to the CDBG Program. Owner-occupied units may be rehabilitated without relocating the owner, depending upon the nature of the work to be undertaken. Non-owner occupied units may also be rehabilitated, however, the emphasis of this program will be on developing home ownership. Approximately 12 homes will be rehabilitated in the next three years.

Responsible Agency:	Redevelopment Agency
Financing Source:	Redevelopment Agency
Time Frame:	1993-1996

GOAL 3

Assist in achieving housing affordability for all residents, as is reasonably and financially possible.

Policies

- 3.1 The City will coordinate with the Department of Housing and Urban Development (HUD) and publicize and encourage the use of Section 8 rental assistance certificates.
- 3.2 The City and the Redevelopment Agency will continue to provide assistance in the development of new affordable housing purchase opportunities.
- 3.3 Provide incentives for and otherwise encourage the private development of new affordable housing for low and moderate income households.
- 3.4 Investigate and pursue programs and funding sources designed to expand housing opportunities for low and moderate income households, including the elderly and disabled.
- 3.5 Facilitate the construction of low and moderate income housing, to the extent possible.

Programs/Quantified Objectives

3.1.1 Section 8 Rental Assistance

The City Housing Authority currently administers the Section 8 Rental Assistance program. Certificates are available for 47 units in the City and vouchers are available for 50 units. The Housing Authority has recently applied for additional funding which will enable the Housing Authority to administer an additional 25-50 certificates for families, elderly, handicapped and disabled persons over the next 12 months.

Responsible Agency:	City Council and Housing Authority
Financing Source:	HUD
Time Frame:	Annual

3.1.2 SB - 99 Mortgage Revenue Bonds

To address the needs of owner-occupied affordable housing, the City Redevelopment Agency entered into the SB-99 Mortgage Revenue Bond Program. Through a six million dollar bond, the program funded approximately 500 condominium dwelling units that were affordable to first time home buyers, and helped spur private investment in the community. Financing was provided for 406 new residential units priced from \$49,500 to \$85,000, and for approximately 65 new and existing units priced in the \$38,000 to \$50,000 range. The redevelopment financing was provided for units located in areas zoned for R-1 and R-2. The program will be continued through the 1994-1995 fiscal year.

Responsible Agency:	Redevelopment Agency
Financing Source:	Redevelopment Agency
Time Frame:	1992-1995

3.1.3 Federal HOME Program

The City has received approval of its Federal HOME Program and will use these funds for rehabilitating 11 housing units. Two hundred thousand dollars (\$200,000) has been funded for 1993-1994. The City will seek funds in 1994-1995 to construct low and moderate housing.

Responsible Agency: City of Hawaiian Gardens
Financing Source: Federal Government
Time Frame: 1993-1994

3.1.4 Youthbuild (HUD) Program

The City will seek federal Youthbuild (HUD) funds to construct low and moderate income housing in 1994-1995.

Responsible Agency: City of Hawaiian Gardens
Financing Source: Federal Government (HUD)
Time Frame: 1994-1995

3.1.5 Rental Housing Assistance Program

The Redevelopment Agency will provide rental assistance for senior residents, in addition to the Section 8 rental assistance program. Similar to Section 8 assistance, the program will provide monthly housing payment assistance. Approximately 20 to 25 eligible seniors will receive assistance under this program.

Responsible Agency: Redevelopment Agency
Financing Source: Redevelopment Agency
Time Frame: 1994-1996

3.1.6 Multi-Family Rental Units

The City will assist in the transition of an existing R-1 residential area to R-4, and the development of 15 multi-family "townhome-style" rental units. Of the total units developed, 51% will be designated for low-income renters. In support of this program, the Redevelopment Agency will assist with the implementation of infrastructure improvements, such as street widening and sewers, as necessary.

Responsible Agency: Community Development Department
Financing Source: Redevelopment Agency
Time Frame: 1994-1996

GOAL 4

Assure increased energy efficiency and self-sufficiency through the use of energy conservation measures in all homes, including low- and moderate-income housing.

Policies

- 4.1 Promote the use of energy and water conservation measures in low- and moderate-income housing.
- 4.2 Promote opportunities for the use of solar energy by assuring solar access on all properties to be developed in the future.
- 4.3 Promote plans and programs for well-designed energy efficient lower income housing development located in areas appropriate to the needs and desires of the constituent population, and convenient to public transportation, shopping, recreation, and other community facilities.

Programs/Quantified Objectives

4.1.1 Weatherization Program

The City will pursue the use of energy conservation measures in low- and moderate-income housing through a rehabilitation and "weatherization" program and will investigate local programs with the Southern California Gas Company and Southern California Edison Company. Approximately 20 units per year will be weatherized as part of the Rehabilitation Program.

Responsible Agency:	Community Development Department
Financing Source:	State Office of Economic Opportunity
Time Frame:	1993-1998

GOAL 5

Implement the goals, policies and programs in this document within the established time frames, and ensure that they continue to be compatible with the other elements of the General Plan.

Policies

- 5.1 The Housing Element goals, policies and programs will be reviewed to evaluate their effectiveness and appropriateness.
- 5.2 The Housing Element goals, policies and programs will be reviewed in relation to the other elements of the general plan which might impact housing decisions.
- 5.3 The goals, policies and programs will be modified as necessary, to ensure appropriateness and effectiveness, as well as compatibility with the other elements of the general plan.

Programs/Objectives

5.1.1 Annual Review of Housing Element

The Planning Commission and the City Council will conduct an annual review of the Housing Element Implementation schedule. The review will include the following information:

- a. A log of new residential development permits and completion reports;
- b. An update or inventory on approved projects;
- c. Annual estimate of population from the State Department of Finance; and
- d. Vacant land and zoning survey.

5.1.2 Publicity and Public Information

The City will publicize and make available to residents and property owners information regarding the availability of low interest loans for property rehabilitation. The City will also continue to publicize information on the availability of grants and low-interest loans for handicapped and elderly households. In addition, the City will continue to work with and aid private developers in expanding housing opportunities in Hawaiian Gardens.

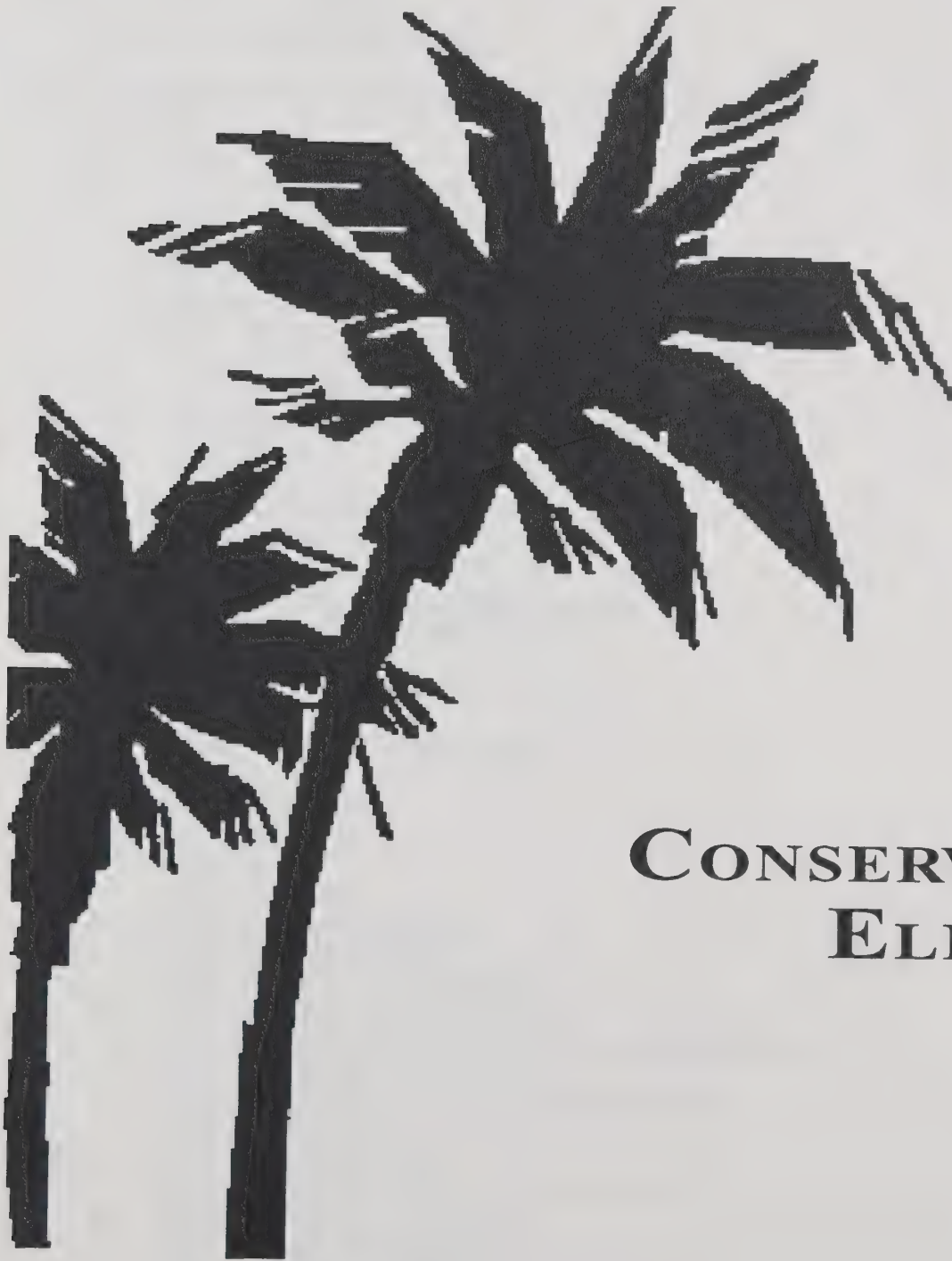
Responsible Agency:	Community Development Department
Financing Source:	Federal Community Development Block Grants and Redevelopment Agency
Time Frame:	Annual

5.1 Maximum Units

The maximum number of housing units that can be constructed, rehabilitated and conserved over the next five year time period is 779 units, as indicated below. This number can only be accomplished with the continued flow of funds from Federal, State, Redevelopment Agency and other local funds.

<u>Income Category</u>	<u>Maximum Number of Units</u>	<u>Percent Distribution</u>
Very Low	234	30%
Low	156	20%
Moderate	156	20%
Upper	<u>233</u>	<u>30%</u>
TOTAL	779	100%

CITY OF HAWAIIAN GARDENS
GENERAL PLAN UPDATE



CONSERVATION
ELEMENT

CONSERVATION ELEMENT

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	CO-1
1.1 Purpose and Intent	CO-1
1.2 Statutory Requirements	CO-1
2.0 RESOURCES AND THEIR MANAGEMENT	CO-2
2.1 Soils	CO-2
2.1.1 Medium-Grained Holocene Alluvium	CO-2
2.1.2 Fine-Grained Holocene Alluvium	CO-2
2.1.3 Basement Complex	CO-2
2.1.4 Soil Erosion	CO-3
2.2 Water Resources	CO-3
2.2.1 Supply	CO-3
2.2.2 Demand	CO-3
2.2.3 Water Quality	CO-4
2.3 Biotic Resources	CO-5
2.3.1 Flora	CO-5
2.3.2 Fauna	CO-5
2.4 Cultural Resources	CO-8
2.5 Energy Resources	CO-9
2.5.1 Supply	CO-9
2.5.2 Existing Conservation Programs	CO-9
2.5.3 Related Goals and Policies	CO-10
3.0 GOALS, OBJECTIVES AND POLICIES	CO-11
4.0 IMPLEMENTATION PROGRAMS	CO-16
4.1 Water Programs	CO-16
4.1.1 New Uses	CO-16
4.1.2 Audits	CO-16
4.1.3 Rebates	CO-16
4.1.4 State-wide Policies	CO-16
4.1.5 Funding Sources	CO-17
4.1.6 Waste Water Recycling	CO-17
4.2 Wildlife Enhancement Programs	CO-17
4.2.1 Public Facilities Maintenance and Improvement	CO-17
4.2.2 Landscape Master Plan	CO-17
4.2.3 List of Acceptable Landscape Materials	CO-17
4.2.4 Site Surveys	CO-17
4.2.5 Code Enforcement	CO-17
4.2.6 Public Information and Presentations	CO-17
4.3 Cultural Resources Programs	CO-18
4.3.1 Register of Historic Resources	CO-18
4.3.2 Protection and Preservation Ordinance	CO-18

CONSERVATION ELEMENT

TABLE OF CONTENTS (Continued)

	<u>Page</u>
4.4 Energy Programs	CO-18
4.4.1 New Uses	CO-18
4.4.2 Audits	CO-18
4.4.3 Funding Sources	CO-18
4.4.4 City Building Code Requirements	CO-18
4.4.5 Solar Access	CO-19
4.4.6 Allowable Uses	CO-19
4.4.7 Retrofits	CO-19
4.4.8 Public Information and Publicity	CO-19

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Existing and Future Water Demands	CO-4
2. Artesia System 1991 Water Quality Information	CO-6
3. Typical Animal Species	CO-7

1.0 INTRODUCTION

1.1 Purpose and Intent

The conservation element emphasizes the conservation, development and utilization of resources located within the City of Hawaiian Gardens. Its intent is to protect and maintain the City's natural and cultural resources, and to prevent their wasteful exploitation and destruction.

The City, because of its highly urbanized nature, permits the extraction of natural resources through restrictions delineated in the City's Municipal Code. This element, therefore, will not undertake to provide a means whereby natural resources can be extracted, but will explain in detail those natural and cultural resources presently found in the City of Hawaiian Gardens which the City desires to protect.

1.2 Statutory Requirements

Issues regarding natural resources must be addressed in the City's conservation element, as mandated in Government Code Section 65302(d):

The general plan shall include a conservation element for the conservation, development, and utilization of natural resources, including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources.

The natural resources evaluated in the Hawaiian Gardens conservation element include:

1. Soils
2. Water
3. Biota
4. Cultural
5. Energy

Waste stream resources, including solid waste and household hazardous wastes, are discussed in the Waste Management Element, and air resources are addressed in the Air Quality Element.

2.2.3 Water Quality

The Federal Safe Drinking Water Act of 1974 and its 1986 amendments are intended to ensure the quality of our water supplies. The Federal Government, through the U.S. Environmental Protection Agency (EPA), sets standards and monitoring requirements for water utilities. California, through its Environmental Protection Agency, has the option of adopting the Federal Standards or setting more stringent ones. These standards are set after considerable research and data gathering, as well as analysis by health experts. There are over 70 standards in California for constituents that may be found in drinking water, and more standards are expected in the next few years.

TABLE 1

**EXISTING AND FUTURE WATER DEMANDS
ARTESIA SYSTEM SOUTH PORTION**

Year	Customers	Annual Demand (Ac.Ft.)	Avg. Day (GPM)	Max. Day (GPM)	Peak Hr. (GPM)
1990	6,910	4,809	2,980	5,590	9,504
1991	6,960	4,844	3,002	5,631	9,572
1992	7,010	4,879	3,023	5,671	9,641
1993	7,060	4,914	3,045	5,712	9,710
1994	7,110	4,949	3,066	5,752	9,779
1995	7,160	4,983	3,086	5,793	9,847
2000	7,410	5,157	3,196	5,995	10,191
2005	7,660	5,331	3,303	6,197	10,535
Ultimate	7,959	5,533	3,428	6,432	10,934

Source: Southern California Water Company

Testing of the domestic water supply is performed by the Southern California Water Company for various constituents, substances and physical agents which the Federal or State Government has determined allowable maximum contaminant levels (MCL). Testing frequency is determined by the State, and varies depending on the source (ground or surface water), and prior test results. Presently, Southern California Water Company is required to perform water quality testing according to the following schedule: for organic chemicals, once every three years (if prior testing resulted in non-detectable measurements); for inorganic chemicals and general minerals, once every three years in groundwater, and once per year in

surface water; for general physical conditions, once every three years; and, for radioactivity, once every four years. Southern California Water Company also performs weekly tests for residual chlorine, pathogenic (disease-causing) bacteria, and odor and clarity. In addition to these constituents, the company also monitors for 42 additional organic chemicals for which the State EPA and U.S. EPA have not yet set standards.

Results of all water quality analyses performed through December 31, 1991 for the Artesia System indicate that potable water received by the customers within the City of Hawaiian Gardens meets all Federal and State primary (health-related) and secondary (aesthetic) drinking water quality requirements. All results were either below the detection levels or below the MCL. The 1991 water quality information for the Artesia System is indicated in Table 2.

The Los Angeles County Department of Public Works, Waste Management Division, monitors the quality of storm water runoff from various locations. The storm water runoff from Hawaiian Gardens is monitored at the Coyote Creek Channel Station No. F354-R on Spring Street in Long Beach. The water quality tests performed on the runoff water indicate that this water meets most of the MCLs established by the U.S. EPA for potable water. Although there are constituents which exceeded the MCL, such as iron, zinc, total coliform and fecal coliform, this water is not used for human consumption, and is therefore untreated.

2.3 Biotic Resources

2.3.1 Flora

Hawaiian Gardens and the surrounding region was a vast rural area during the 1930's and 1940's, primarily known for its agricultural production. In that respect, natural grasslands and other flora were destroyed by farming of these crops. Development of this rural area into an urban society necessitated large amounts of soils to be removed in order to pave the way for housing sites, streets, and other public improvements.

The City of Hawaiian Gardens contains biological resources typical of the urban areas of Southern California. All significant original native chaparral and grassland vegetation has been removed from the area over the years. These habitats, and their associated wildlife, have long since been replaced by ornamental planting, which include a variety of tree species.

2.3.2 Fauna

Only a few vacant parcels exist in the 0.9 square mile city. These lots are utilized by animal species which have adapted to highly disturbed and urbanized environments. Typical species found in this urbanized environment are listed in Table 3.

TABLE 2
ARTESIA SYSTEM 1991 WATER QUALITY INFORMATION

PARAMETER	UNITS	MAXIMUM CONTAMINANT LEVEL	SURFACE WATER RESULTS		GROUNDWATER RESULTS		PURCHASED RESULTS	
			LOW-HIGH	AVERAGE	LOW-HIGH	AVERAGE	LOW-HIGH	AVERAGE
Primary Standards — Mandatory health related standards								
CLARITY								
Turbidity (treated surfaces)	NTU	0.5	NA	NA	NA	NA	0.07 - 0.10	0.09
Turbidity (system)	NTU	5.0	NA	NA	0.1 - 1.5	.23	NA	NA
MICROBIOLOGICAL								
Coliform Bacteria	% Tests Positive	10%	NA	NA	0% - 1.7%	0.18%	0% - 0.0040%	.0011%
ORGANIC CHEMICALS								
Total Trihalomethanes		0.10	NA	NA	ND - .023	.006	0.028 - 0.071	0.046
Endrin	ppm	0.0002	NA	NA	ND	ND	ND	ND
Lindane	ppm	0.004	NA	NA	ND	ND	ND	ND
Methoxychlor	ppm	0.1	NA	NA	ND	ND	ND	ND
Toxaphene	ppm	0.005	NA	NA	ND	ND	ND	ND
2,4-D	ppm	0.1	NA	NA	ND	ND	ND	ND
2,4,5-TP Silvex	ppm	0.01	NA	NA	ND	ND	ND	ND
Atrazine	ppm	0.003	NA	NA	ND	ND	ND	ND
Beniazon	ppm	0.018	NA	NA	ND	ND	ND	ND
Benzene	ppm	0.001	NA	NA	ND	ND	ND	ND
Carbon Tetrachloride	ppm	0.0005	NA	NA	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ppm	0.0002	NA	NA	ND	ND	ND	ND
1,4-Dichlorobenzene	ppm	0.005	NA	NA	ND	ND	ND	ND
1,2-Dichloroethane	ppm	0.0005	NA	NA	ND	ND	ND	ND
1,1-Dichloroethylene	ppm	0.005	NA	NA	ND	ND	ND	ND
1,3-Dichloropropene	ppm	0.0005	NA	NA	ND	ND	ND	ND
Ethylbenzene	ppm	0.680	NA	NA	ND	ND	ND	ND
Ethylene Dibromide	ppm	0.00002	NA	NA	ND	ND	ND	ND
Molinate	ppm	0.02	NA	NA	ND	ND	ND	ND
Monochlorobenzene	ppm	0.030	NA	NA	ND	ND	ND	ND
Simazine	ppm	0.01	NA	NA	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ppm	0.001	NA	NA	ND	ND	ND	ND
Tetrachloroethylene	ppm	0.005	NA	NA	ND	ND	ND	ND
Thiobencarb	ppm	0.07	NA	NA	ND	ND	ND	ND
1,1,1-Trichloroethane	ppm	0.200	NA	NA	ND	ND	ND	ND
1,1,2-Trichloroethane	ppm	0.032	NA	NA	ND	ND	ND	ND
Trichloroethylene	ppm	0.005	NA	NA	ND	ND	ND	ND
Vinyl Chloride	ppm	0.0005	NA	NA	ND	ND	ND	ND
Xylenes	ppm	1.750	NA	NA	ND	ND	ND	ND
Cis-1,2-Dichloroethylene	ppm	0.006	NA	NA	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	ppm	0.01	NA	NA	ND	ND	ND	ND
1,1-Dichloroethane	ppm	0.005	NA	NA	ND	ND	ND	ND
1,2-Dichloropropane	ppm	0.005	NA	NA	ND	ND	ND	ND
Trichlorofluoromethane (Freon 11)	ppm	0.15	NA	NA	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ppm	1.2	NA	NA	ND	ND	ND	ND
Carbofuran	ppm	0.018	NA	NA	ND	ND	ND	ND
Glyphosate	ppm	0.7	NA	NA	ND	ND	ND	ND
Chlordane	ppm	0.0001	NA	NA	ND	ND	ND	ND
Heptachlor	ppm	0.00001	NA	NA	ND	ND	ND	ND
Heptachlor epoxide	ppm	0.00001	NA	NA	ND	ND	ND	ND
Di(2-ethylhexyl)phthalate	ppm	0.004	NA	NA	ND	ND	ND	ND
INORGANIC CHEMICALS								
Aluminum	ppm	1.	NA	NA	<0.20 - <0.20	<0.20	0.080 - 0.361	0.210
Arsenic	ppm	0.05	NA	NA	<0.01 - <0.01	<0.01	0.002 - 0.003	0.002
Barium	ppm	1.	NA	NA	<0.10 - <0.10	<0.10	0.164 - 0.192	0.178
Cadmium	ppm	0.010	NA	NA	<0.01 - <0.005	<0.005	ND	ND
Chromium	ppm	0.05	NA	NA	<0.10 - <0.10	<0.10	ND	ND
Fluoride	ppm	1.4	NA	NA	0.2 - 0.4	0.3	0.17 - 0.29	0.24
Lead	ppm	0.05	NA	NA	<0.10 - <0.10	<0.10	ND	ND
Mercury	ppm	0.002	NA	NA	<0.001 - <0.001	<0.001	ND	ND
Nitrate	ppm	45.	NA	NA	.44 - 3.7	1.4	0.16 - 0.71	0.24
Selenium	ppm	0.01	NA	NA	<0.005 - <0.005	<0.005	0.002 - 0.002	0.002
Silver	ppm	0.05	NA	NA	<0.01 - <0.01	<0.01	ND	ND
RADIOACTIVITY								
Gross Alpha Activity	pCi/L	15	NA	NA	0.2 - 7.0	1.4	0.3 - 2.9	2.2
Gross Beta Activity	pCi/L	50	NA	NA	NA	NA	0.3 - 6.2	3.2
Tritium	pCi/L	20,000	NA	NA	NA	NA	ND	ND
Strontium	pCi/L	8	NA	NA	NA	NA	ND	ND
Radium 226 & 228 combined	pCi/L	5	NA	NA	NA	NA	ND	ND
Uranium	pCi/L	20	NA	NA	NA	NA	ND - 5	3

Notes:

NA: Non-applicable
ppm: parts per million
NTU: Nephelometric Turbidity Unit (cloudiness)

ND: Non-detectable
<: Less Than
pC/l: pico Curies per liter (radioactivity)

Source: Southern California Water Company, 1991.

TABLE 3
TYPICAL ANIMAL SPECIES

Common Name	Scientific Name
Side-blotched Lizard	<i>Uta stansburiana</i>
Western Fence Lizard	<i>Sceloporus occidentalis</i>
Bonaparte's Gull	<i>Larus philadelphia</i>
California Gull	<i>Larus californicus</i>
Rock Dove	<i>Columba livia</i>
Mourning Dove	<i>Zenaida macroura</i>
American Crow	<i>Corvus brachyrhynchos</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Lark Sparrow	<i>Chondestes grammacus</i>
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
House Finch	<i>Carpodacus mexicanus</i>
Lesser Goldfinch	<i>Carduelis psaltria</i>
House Sparrow	<i>Passer domesticus</i>
European Starling	<i>Sturnus vulgaris</i>
Virginia Opossum	<i>Didelphis virginiana</i>
California Ground Squirrel	<i>Spermophilus beecheyi</i>
Botta's Pocket Gopher	<i>Thomomys bottae</i>
House Mouse	<i>Mus musculus</i>
Domesticated horses, dogs, and cats	

2.4 Cultural Resources

Cultural resources can be regarded as symbols of a people and their civilization, and can represent human activity in pre-history, as well as the present. Cultural resources can provide a sense of place, history, and pride for residents of a region.

The Los Angeles Basin has a rich cultural history that dates back to the early settlements by American Indians. The Gabrielino Indians, also known as the Tongva, occupied an extensive region stretching from the San Gabriel Mountains to the coast, including the area now occupied by Hawaiian Gardens. The tribe had a large village known as Puvunga, near the present day site of Cal State Long Beach. Indians that lived in the village often went to Hawaiian Gardens to hunt. Evidence of this tribe's presence in the City was substantiated when artifacts such as shells, stone utensils and arrow points were found on Pioneer Boulevard during the construction of Bloomfield Park.

In 1784, land now constituting Hawaiian Gardens, came under Spanish ownership through a 300,000-acre land grant to Corporal Manuel Nieto. Nieto developed the acreage into six (6) rancheros for the raising of cattle and horses. Consisting mainly of wooded marsh lands, the area was referred to as "The Delta", and used extensively for hunting, watering horses, and cattle. Following the end of the Gold Rush and its related boom in the demand for meat, the large cattle ranches were subdivided and replaced with small grain farms.

Much of the history of Hawaiian Gardens was shaped by the continuous flooding of the San Gabriel River. During a two-week flood in 1867-1868, the San Gabriel River flooded much of the area, changed its course, and eventually developed into its present day course. The "old" San Gabriel River became known as the Rio Hondo.

The area was first named Hawaiian Gardens in 1927, from a shack near what is now the corner of Norwalk Boulevard and Carson Street. Developed as a waystop for travellers on a trail along Coyote Creek, the proprietor served soda and sandwiches from a bamboo framed stand covered with palm fronds, which he called "Hawaiian Gardens".

At the time of the Depression in 1929, Hawaiian Gardens was a small, rural community of dairy and truck farms. The area's cheap land prices and rich soil attracted many new settlers to the area. Later, World War II also served as an impetus to growth, as people migrated to the area to work at the many aircraft assembly plants. The first post office in the area that is now Hawaiian Gardens was established in 1944. Following the war, tract homes were built south of Carson Street, and the development was named "Hawaiian Gardens."

There were various unsuccessful attempts by Artesia and Long Beach to annex the area in the 1950's, however, local residents resisted when it was evident that annexation would leave much of the area's needs for roads and other improvements neglected. After two initial unsuccessful bids, the City was incorporated in April of 1964.

The past discovery of Indian artifacts, and the potential presence in the City of unknown artifacts and buildings, which may have historical importance, contribute to the City's recognition of the importance of preserving cultural and historical resources, as reflected in the policies and programs contained in this element of the General Plan.

2.5 Energy Resources

Energy issues impact a wide range of daily activities. This includes the more obvious uses of energy for transportation, space heating and cooling, water heating, and lighting. Less obvious, but equally important, is the energy embodied in the materials and foods consumed by City residents on a daily basis.

Policies in this element attempt to conserve energy by reducing the waste and excessive use of natural gas and electricity. Indirectly, this also helps to conserve water resources as well. This wide-ranging approach to energy conservation will help to reduce the energy budget of Hawaiian Gardens' citizens.

2.5.1 Supply

All traditional energy resources consumed by land uses of the City are imported. There are no wells producing oil or natural gas, coal deposits, generating stations, or refineries and processing facilities within the City of Hawaiian Gardens. Natural gas is imported by the Southern California Gas Company ("Gas Company"), from its interstate system. Electrical energy is accessed by transmission and distribution lines from substations owned by Southern California Edison Company.

2.5.2 Existing Conservation Programs

Energy conservation is important in preserving non-renewable energy resources to ensure that these resources are available to future generations. There are a number of benefits associated with energy conservation, such as improved air quality, reduction of energy costs, waste stream reduction, and water conservation. As has been clearly demonstrated in recent years, these non-renewable sources of energy are extremely limited, and have been wastefully consumed. Sprawling urban development, which necessitates extensive automotive travel, consumes vast quantities of oil and gasoline. Structures with large areas of exposed glass require extensive air conditioning in the summer and heating in the winter.

The Gas Company implements conservation programs annually for both the residential and commercial sectors. For the residential sector, two programs are available in 1992. The rebate program is offered to all residents, and provides rebates for the purchase of energy efficient appliances, and for the installation of insulation, weatherstripping, and duct wrap. The low-income residential programs include a weatherization program for renters and owner-occupants, which provides installation of gas saving devices, and an appliance repair and replacement program for owner-occupied units.

In the commercial sector, four conservation programs are available in 1992. Services include energy efficiency audits, conducted by Gas Company representatives, and a financial incentive program which pays for up to 25 percent of the cost of replacement appliances, and up to 50 percent of the cost for weatherization devices. In addition, the Gas Company's free adjustment service provides leak testing and flue adjustments, and the Energy Management Consulting Program will contribute to the cost of energy efficiency studies conducted by outside consultants, either one-half the cost of the study, or fifty cents for each therm saved annually, whichever is lower. For all of these programs, pre-approval by the Gas Company for the respective measures and/or methods is required.

The Southern California Edison Company also offers residential and commercial conservation programs, updated on an annual basis. The residential rebate program, for units heated by electricity only, provides rebates for the purchase of energy efficient refrigerators during the summer months, and for the purchase of horizontal access clothes washers. Rebates are also available for replacing existing electric heating/cooling units with more efficient models. Rebates are available for pre-approved, specific heat pumps, air conditioners, and water heaters. As with the Gas Company programs, consumers must coordinate with Edison Company to determine eligibility.

2.5.3 Related Goals and Policies

A number of goals and policies in other elements of the City of Hawaiian Gardens General Plan address energy issues, both directly and indirectly. In the Land Use Element, the goal of increasing local jobs will reduce commuter travel. The Housing Element also proposes to reduce energy consumption with the installation of conservation measures in single and multiple family units. Circulation and air quality goals and policies will facilitate the smooth flow of traffic. Goals and policies in the Waste Management Element will reduce the waste stream, and the use of raw, or virgin resources. All of these programs will contribute to energy savings.

3.0 GOALS, OBJECTIVES, AND POLICIES

Goals reflect broad aims and basic values, identify the end objectives, and establish the basis and intent of implementing policy and program formulation. The goals, objectives and policies of the City of Hawaiian Gardens, in relation to conservation of natural resources, are outlined below.

GOAL 1

Promote conservation, development and utilization of natural resources, which includes flora, fauna, wildlife and other natural resources in the City of Hawaiian Gardens.

Objective 1.1

Maintain existing significant vegetation on present and future public and private properties throughout the City.

Policies

- 1.1.1 Retain and maintain the quality and health of existing landscape in the public open spaces (sidewalks, alleys, parks, civic facilities, and schools) and replace vegetation which is unhealthy or dead, ensuring that such actions are in accordance with the Open Space/Recreation Element policies.
- 1.1.2 Encourage property owners to maintain existing vegetation on developed sites and replace unhealthy or dead landscape.
- 1.1.3 Encourage developers to incorporate mature and specimen trees and other significant vegetation which may exist on a site into the design of a development project for that site.
- 1.1.4 Require that new development incorporate adequate landscape in accordance with land use amenity policies.
- 1.1.5 Encourage the use of fruit-bearing trees and vegetable gardens in private development projects.

Objective 1.2

Improve the landscape quality of the City's public open spaces.

Policies

- 1.2.1 Encourage types and patterns of development which will minimize destruction of, or damage to, significant biotic resources within the planning area.
- 1.2.2 Encourage the planting of trees and other vegetation, especially native species, to enhance the environment.

- 1.2.3 Provide for landscape improvements of the City's sidewalks, streets, civic facilities, and other public spaces in accordance with the Open Space/Recreation Element policies.
- 1.2.4 Provide for landscape improvements of the City's Parks in accordance with the Open Space/Recreation Element landscape policies.

Objective 1.3

Identify and encourage the preservation of any significant architectural, historical, and cultural resources.

Policies

- 1.3.1 Compile and maintain a current inventory of architectural, cultural, and historic resources within Hawaiian Gardens.
- 1.3.2 Consider the potential establishment of special zones characterized by the presence of significant architectural, historical, and cultural commercial and residential resources which would provide: (a) guidelines for rehabilitation and new construction; (b) demolition control; and (c) use regulation.
- 1.3.3 Require that significant architectural, historic, and cultural buildings be renovated according to the following guidelines:
 - a. A compatible use be located in the structure which requires the minimum alteration to the historical character of the structure and its environment;
 - b. Rehabilitation should not destroy the distinguishing feature or character of the property and its environment and removal or alteration of historical architectural features should be minimized;
 - c. Renovations should recognize buildings as products of their own time, discouraging alterations to create an appearance inconsistent with the actual character of the buildings;
 - d. The existing character of building/house spaces and setbacks should be maintained; and
 - e. The existing height, bulk and massing which serves as an important characteristic of the resource should be retained.
- 1.3.4 Encourage the adaptive reuse of buildings and structures of significant historical or cultural value.

GOAL 2

Promote the orderly management of the City's natural resources to prevent their waste, destruction and neglect.

Objective 2.1

Encourage the conservation and protection of natural resources within the City of Hawaiian Gardens.

Policies

- 2.1.1 Cooperate with Federal, State and County governments and local agencies concerning the maintenance and improvement of the quality and quantity of local and regional groundwater resources.
- 2.1.2 Reduce per capita water consumption by requiring the use of drought tolerant landscapes in new developments and encourage the replacement of existing water consumptive landscapes.
- 2.1.3 Study the feasibility of using reclaimed water for irrigation in parks, recreation areas, and industrial uses.
- 2.1.4 Consider the establishment of a rebate program for the replacement of aging, leaking, and/or inefficient plumbing with more efficient, water-saving plumbing.
- 2.1.5 Educate the public regarding the need for energy conservation, techniques which can be employed, and systems which are available.
- 2.1.6 Establish a community recycling program to encourage the reuse of newspapers, cans, bottles and other recyclable materials.
- 2.1.7 Cooperate with adjacent municipalities to consider undertaking and operating solid waste recycling programs pursuant to the City's adopted Source Reduction and Recycling Element.
- 2.1.8 Examine the feasibility of participating in a regional waste water recycling program.
- 2.1.9 Work with other cities and the League of California Cities to develop a strong State-wide water conservation policy.
- 2.1.10 Encourage the incorporation of water and energy conservation features in the design of all new construction and site development, and the installation of conservation devices in existing developments, including but not limited to: thermal insulation; water-tight plumbing; low-flow irrigation and plumbing fixtures; sealed gas lines; double pane glass; and other similar techniques.
- 2.1.11 Encourage energy audits of existing structures, identifying levels of existing energy uses and potential conservation measures.

- 2.1.12 Provide incentives for the installation of energy conservation measures in existing buildings characterized by a high level of energy consumption, including technical assistance and possible low-interest loans.

Objective 2.2

Formulate, establish and conform to a City-wide energy management plan which sets specific energy use goals for Hawaiian Gardens.

Policies

- 2.2.1 Establish land-use patterns that promote energy efficiency. Include such diverse factors as cluster housing, street orientation, and the location of commercial and industrial land.
- 2.2.2 Encourage development proposals which allow easy access to public transit systems, and encourage clustering of high density residential, commercial, service and other users into multi-use centers to reduce transportation. These centers shall be adjacent to public transportation terminals and routes.
- 2.2.3 Continue to provide energy efficient transportation systems, including various forms of mass transit, dial-a-bus, dedicated roadways, conventional buses, etc., as well as less conventional transportation means such as electric cars, walking, biking, mopeds, and others.
- 2.2.4 Encourage increased vehicle occupancy and car pooling, provide attractive walkways and bike paths, improve traffic monitoring and metering systems, and provide new systems to increase energy efficiency of freight and passenger movement.
- 2.2.5 Establish efficiency standards for new residential and commercial buildings. The standards shall address such items as site design (building orientation), insulation, fenestration (placement of windows and other building openings), shading, solar rights, landscaping, solar heating and cooling, HVAC (heating, ventilation and air conditioning) equipment, HVAC systems, economizer cycles, heat recovery, energy storage capability, appliance efficiency and lighting efficiency.
- 2.2.6 Require that sites be designed to allow optimum orientation and configuration to minimize energy consumption.
- 2.2.7 Perform energy audits for City owned facilities.

Objective 2.3

Promote and encourage energy efficiency and the use of renewable energy resources.

Policies

- 2.3.1 Explore alternative energy sources. This includes sources such as wind, solar, and other more exotic sources.

- 2.3.2 Encourage the use of alternate energy sources, including those above, in industrial, commercial and residential developments.
- 2.3.3 Promote solar assisted heating and cooling systems in all new or multiple unit residential, commercial, and industrial buildings.
- 2.3.4 Encourage the use of passive design concepts which make use of the natural climate to increase energy efficiency.
- 2.3.5 Require new development to utilize design techniques which conserve energy.
- 2.3.6 Evaluate the feasibility of using solar collectors on public buildings and providing incentives to landlords and developers to install solar collectors within prescribed height limitations.
- 2.3.7 Encourage new residential, commercial and industrial buildings to have the structural and design capability to incorporate solar collection systems with clear and optimum exposure to the sun.
- 2.3.8 Require that new construction not preclude the use of solar energy systems by uses and buildings on adjacent properties.
- 2.3.9 Consider and encourage the formulation of an ordinance to guarantee maximum solar access for all uses in the City.
- 2.3.10 Encourage the establishment of methanol production within Los Angeles County, through the utilization and development of production facilities at existing and future landfill sites.

4.0 IMPLEMENTATION PROGRAMS

4.1 Water Programs

4.1.1 New Uses

Incorporate requirements into the City's Zoning Ordinance for the evaluation of new uses, which consume very high levels of water, according to the means by which these levels can be reduced and, if not possible, the benefit to the City as an appropriate use (including public review).

4.1.2 Audits

Cooperate with the local water purveyor to initiate and facilitate programs for water audits of existing structures. These should define the current levels of use, and compare these to current standards for similar types of structures, and prescribe corrective methods to improve conservation. The City should initiate programs which facilitate the retrofitting of existing buildings and required improvements. These may include technical assistance and low-interest loans to property owners. The City will also conduct audits on all City buildings and incorporate measures to increase their water use efficiency.

4.1.3 Rebates

Discuss with the local water agency serving Hawaiian Gardens, the possibility of a rebate program for property owners who upgrade defective plumbing.

4.1.4 State-wide Policies

The Water Conservation in Landscaping Act (AB 325; Government Code Sections 65591-65597) requires all California cities to adopt a local Water Efficient Landscape Ordinance, or to adopt the State's Model Ordinance. The State Model Ordinance will automatically go into effect January 1, 1993 if the City does not adopt its own, or issues findings that no ordinance is necessary.

As stated in the proposed regulations, the purpose of the ordinance is to:

1. Promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible;
2. Establish a structure for designing, installing, and maintaining water efficient landscapes in new projects; and
3. Establish provisions for water management practices and water waste prevention for established landscapes.

The model ordinance includes provisions for new or rehabilitated landscapes, and for existing landscapes, and includes examples of water conservation concept statement, methods to calculate water use and water allowance, in addition to design criteria, schedules and technical data. The City will review the model ordinance, and decide to adopt the State Ordinance or to prepare its own. The City's Municipal Code will then be revised to incorporate the Ordinance.

4.1.5 Funding Sources

Solicit State and Federal funds to implement the City's water conservation programs as such revenue becomes available.

4.1.6 Waste Water Recycling

Coordinate with regional planning associations studies, such as SCAG, to examine the feasibility of participating in a regional waste water recycling program.

4.2 Wildlife Enhancement Programs

4.2.1 Public Facilities Maintenance and Improvement

The City will continue existing landscape maintenance and improvement programs for public rights-of-way, parks, and other City-owned properties. The effectiveness and value of these shall be monitored periodically, and revisions implemented to account for any deficiencies.

4.2.2 Landscape Master Plan

The City shall prepare landscape master plans for public open spaces and parks in accordance with Open Space/Recreation Element landscape programs.

4.2.3 List of Acceptable Landscape Materials

The City will formulate a list of acceptable landscape materials for existing uses and new private development projects. The list will promote the use of landscape types and species that: a) have demonstrated their ability to be adequately maintained and to flourish in Hawaiian Gardens' environment; b) are smog- and drought-tolerant; c) require low maintenance; and d) do not require pesticides.

4.2.4 Site Surveys

The City will require that a survey of on-site vegetation be conducted for all projects subject to development review procedures, to identify existing mature and specimen trees and other significant vegetation. This survey should be conducted by a qualified botanist or landscape architect. Where such landscape is identified, City staff will work with the developer to determine the means by which such landscape may be integrated with the proposed project and preserved. A variance from the site development standards may be considered to preserve the vegetation, if any adverse impacts of such a variance can be mitigated.

4.2.5 Code Enforcement

Code Enforcement programs of the City will be continued that require property owners to trim overgrown vegetation and to remove dead vegetation which may constitute health and safety risks.

4.2.6 Public Information and Presentations

The City will provide information to developers, property owners, and tenants regarding landscape planning and maintenance, presentations, public seminars and workshops.

4.3 Cultural Resources Programs

4.3.1 Register of Historic Resources

The City will establish and maintain a register of significant historical, architectural, and cultural resources.

4.3.2 Protection and Preservation Ordinance

If found to be necessary, the City will adopt an ordinance which facilitates the protection and preservation of cultural resources. This will be designed to incorporate the pertinent elements of the California Office of Historic Preservation's Handbook for Local Communities (December, 1986, prepared by Les-Thomas Associates).

4.4 Energy Programs

4.4.1 New Uses

The City will incorporate requirements into the Zoning Ordinance for the evaluation of new uses which consume very high levels of energy. The purpose of the evaluation will be to identify the means by which energy use can be reduced and, if this is not possible, to review the appropriateness of the land use in terms of its high energy use versus its benefit to the City

4.4.2 Audits

The City will cooperate with Southern California Edison Company and the Gas Company to initiate and facilitate programs for energy audits of existing structures. The audits will define the current levels of use, compare these to current standards for similar types of structures, and prescribe corrective methods to improve conservation. The City will initiate programs which facilitate the retrofitting of existing buildings and required improvements. These may include technical assistance and low-interest loans to property owners. The City will also conduct energy audits on all City buildings, and incorporate measures to increase their energy efficiency.

4.4.3 Funding Sources

The City will solicit State and Federal funds to implement the City's energy conservation programs as such revenue becomes available.

4.4.4 City Building Code Requirements

The City will incorporate, at a minimum, the following requirements in the City's Building Code:

1. State requirements for the use of energy-efficient fixtures and energy saving design elements in new construction (Government Code Section 66473.1);
2. Inclusion of windows that can be opened in all new construction, unless sealing is required for safety or other purposes considered acceptable by the City;
3. Installation of specified energy conservation elements on transfer of ownership of an existing building.

4.4.5 Solar Access

The City will conduct a study to determine the appropriateness and feasibility of incorporating within the Zoning Ordinance, or as a separate ordinance, standards to ensure solar access for existing and future uses in the City. The study will consider the definition of possible solar envelopes as a function of building height, bulk, and siting/orientation. The City will incorporate code guidelines and standards for new development into the Zoning Ordinance which minimize the impact of shade and shadows on neighboring properties.

4.4.6 Allowable Uses

The City will allow for the use of alternative energy systems, provided that they meet all public safety, health and welfare requirements, and are proven to be reliable. If necessary, back-up systems will also be required.

4.4.7 Retrofits

The City will conduct a study of the feasibility of retrofitting existing buildings with solar and other alternative energy systems.

4.4.8 Public Information and Publicity

The City will provide information to all residents and businesses on the conservation programs offered by the Gas Company and Southern California Edison Company.

CITY OF HAWAIIAN GARDENS
GENERAL PLAN UPDATE



OPEN SPACE/
RECREATION
ELEMENT

OPEN SPACE/RECREATION ELEMENT

TABLE OF CONTENTS

	<u>Page</u>
2.0 INTRODUCTION	OS-1
1.1 Purpose of the Element	OS-1
1.2 Relation to Land Use Element	OS-2
2.0 COMPONENT OVERVIEW	OS-3
2.1 Mixed Use Open Space	OS-3
2.2 Active Use Areas	OS-4
2.2.1 Park Standards	OS-4
2.2.2 Park Types	OS-6
2.2.2.1 Community Parks	OS-6
2.2.2.2 Neighborhood Parks	OS-8
2.2.2.3 Sub-Neighborhood Parks	OS-8
3.0 OPEN SPACE/RECREATION PLAN	OS-10
3.1 Hawaiian Gardens' Mixed-Use Open Space	OS-10
3.2 Hawaiian Gardens' Active Use Areas	OS-10
3.3 Inventory of Facilities	OS-12
3.3.1 Pioneer Park	OS-12
3.3.2 Clarkdale Park	OS-12
3.3.3 Lee Ware Park	OS-12
3.3.4 Venn W. Furgeson Elementary School	OS-12
3.3.5 Killingsworth Junior High School	OS-14
3.3.6 C. Robert Lee Activity Center	OS-14
3.3.7 Bloomfield Park (City of Lakewood)	OS-14
3.3.8 El Dorado Park (City of Long Beach)	OS-14
3.3.9 Open Space	OS-14
3.4 Opportunities for New Facilities	OS-15
3.4.1 Public Facilities	OS-15
3.4.2 Major Linkages	OS-15
3.4.3 Private Facilities	OS-16
4.0 STREETScape AND URBAN DESIGN	OS-17
4.1 Significant Open Space and Streetscape Issues	OS-17
5.0 GOALS AND POLICIES	OS-19
6.0 IMPLEMENTATION PROGRAM	OS-27
6.1 Recreation Programs, Parks and Facilities Action Programs	OS-27
6.2 Street Landscape Action Programs	OS-28
6.3 Pedestrian Improvement Action Programs	OS-28
6.4 Public Signage and City Entry Action Programs	OS-29
6.5 Open Space Financing Action Programs	OS-29
6.6 Safety, Maintenance and Accessibility Action Programs	OS-30
6.7 Public, Private and Regional Resource Coordination Action Programs	OS-30

**TABLE OF CONTENTS
(Continued)**

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Bikeway Classifications	OS-5
2. Park Standards	OS-7
3. Existing Recreational Facilities	OS-11

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Available Recreational Acreage	OS-6
2. Inventory of Recreational Facilities	OS-13

1.0 INTRODUCTION

The Open Space/Recreation Element addresses issues involving a number of environmental concerns within the planning area. These concerns include the management of natural resources, discussed in the Conservation Element, and the preservation and enhancement of scenic and recreation opportunities. This element combines the State-mandated Open Space Element and an optional Recreation Element.

Open space issues and recreation concerns are closely related; therefore, it makes sense to address these issues in a comprehensive manner. One must begin with a definition of what open space consists of as pertaining to Hawaiian Gardens. For purposes of this report "Open Space" shall be defined as,

"space which is not used for buildings or structures, except for man-made facilities related to open-space facilities. It may be air, land or water located in the City. It may be a park, a bicycle path or an apartment balcony. It may be publicly or privately owned. It may be owned in full or it may be only an easement."

1.1 Purpose of the Element

Recreation and the availability of open space is an important facet of everyday life. Never before has public awareness regarding physical fitness and exercise been as great as it is at the present time. Similarly, the value of open space to provide visual relief from urban congestion, relief from the monotony of man-made structures, a more enjoyable community environment, and a heightened sense of community identity, has become necessary. The utilization of open space to make positive contributions to the inhabitants of Hawaiian Gardens by achieving multiple uses of land, shaping urban development and preserving land values is becoming an increasingly important issue.

Organized and informal sports activities promote good health and cooperation among young people. Recreation pursuits are equally important for adults as a means to reduce stress associated with urban living. Parks often provide the only open space for active recreation available to children and adults since yard areas are often too small for play and other recreational activities.

A number of key issues will continue to have an impact on the City's ability to maintain and expand recreation facilities and services in the coming years. Infill development in the City is expected to continue, and increased population will require a full range of services, including those related to parks and recreation.

A number of streets and easements, including those for flood control, are located in Hawaiian Gardens and present the City with a unique opportunity to expand the existing system of bikeways.

A Parks and Recreation Element is often prepared by cities and counties due to the concern of providing sufficient park land for residents, relationship of park space to a City's entire open space resource, and requirement for preparation as a condition of invoking exactions under the Subdivision Map Act, Quimby Act. The Open Space/Recreation Element for the City of Hawaiian Gardens is specifically concerned with enhancing and expanding the City's recreational needs and providing open space.

1.2 Relation to Land Use Element

The Land Use Element reflects existing land use patterns, and attempts to delineate those areas within the City where additional pressure and demands will be placed on facilities. It is anticipated that as certain areas of the City continue with additional residential development, existing facilities will be more intensively utilized, and new or expanded facilities may be needed. A careful watch should be taken to monitor where additional residential development is occurring within the City in order to determine if additional recreation facilities will be required to satisfy the needs and desires of the residents of a particular neighborhood.

Opportunities should be taken whenever possible to provide plazas, tot lots, mini parks and other open space within the commercial centers of town to serve those people who utilize the City's shopping areas. Particular attention should be given to meeting the needs of mothers with young children, the elderly and the handicapped. Facilities should be designed primarily to provide relief from the commercial environment and to encourage passive rest areas.

The City is also dependent upon regional facilities for meeting many of the needs of residents that cannot be met within Hawaiian Gardens. Due to the intensity of development existing in Hawaiian Gardens, it would be impossible to provide regional recreational facilities within the corporate boundaries without displacing a substantial number of residents. For this reason, the City will continue to look to other cities and areas for regional recreational facilities. In addition to the existing regional parks and golf courses in the surrounding areas, approximately 1,900 acres of regional parks, recreational areas, and open space have been developed over the last 20 years within the cities of Cerritos, Long Beach and Los Alamitos. This figure does not include development of the San Gabriel, Rio Hondo and Los Angeles River Trails.

2.0 COMPONENT OVERVIEW

It is the intent of the Open Space/Recreation Element that open space areas of the City be improved to establish a high quality environment for their use by residents, business persons, and visitors. Basic principles include the maintenance and expansion of the City's open space parks and linkages; the installation of trees along all street frontages in the City; use of consistent and well-designed public signage; creation of a distinctive identity for principal commercial districts and residential neighborhoods; improvement of sidewalks with new street furniture, lighting, and landscaping; and continued creation of distinctive entries to the City along major streets.

The Open Space/Recreation Element is comprised of two general use categories including the following:

1. Mixed Use Open Space areas - serving a primary function other than recreation, but having the possibility to provide a wide range of recreational and open space opportunities; and
2. Active Open Space - intended primarily for recreational usage, such as a park.

2.1 Mixed Use Open Space

These areas include both a range of primary land uses and a variety of recreational opportunities. Land-use designations for these areas include the categories: Public Open Space and Semi-public Open Space. The Public category includes land uses such as public facilities, institutions, and flood control channels. Semi-public designations include land uses such as power, water, and gas transmission facilities, and utility right-of-way. Both of these categories have non-recreational primary uses which include open space characteristics. Some of the uses allow for a variety of recreational opportunities within that open space. These opportunities include bicycle paths, landscape buffers, and parks and playfields. Because of the corridor nature of many of these land uses, they provide an opportunity for pedestrian linkages throughout portions of Hawaiian Gardens.

The Circulation Element includes provisions for the establishment of bicycle facilities, such as routes and storage sites. These routes, however, follow established roadways. Use of flood control easements allows for bike routes as well as hiking trails to be separated from traffic.

Bikeways are a significant part of many linear park and trail systems, and are classified into three types:

1. Class I Bikeways

Completely separated right-of-way designated exclusively for bicycles. Through traffic by other vehicles is not allowed and cross-flows by vehicles and pedestrians are minimized.

2. Class II Bikeways

Restricted right-of-way designated exclusively or semi-exclusively for bicycles. Often consists of a delineated bikeway adjacent to vehicular or pedestrian traffic and on the same paved surface. Through traffic by pedestrians and vehicles is not allowed and cross-flows are minimized.

3. Class III Bikeways

Shared right-of-way on the same surface as other traffic. Any pathway which is designated for bicycles and shares its through traffic right-of-way with either moving motor vehicles or pedestrians.

Bikeway classifications are illustrated in Figure 1.

Landscaping along trails should be limited to those areas where landscaping would otherwise be provided. These landscaped areas include: designated parks; landscaped shoulders along roadways; greenbelts; and landscaped open space. Permitting native vegetation to thrive along other trail links will provide habitat for native species.

2.2 Active Use Areas

This component is comprised of land uses and land use designations which are specifically recreational. Land-use designations included are Recreation and, in some cases, Schools and Public Facilities. The Recreation category includes parks used primarily for recreation and open space, and school playgrounds which serve the school district and the general public in a joint use capacity. Auditoriums at schools, and certain public facilities, provide additional recreation opportunities. This component of the Open Space/Recreation Element focuses on planned recreation opportunities for Hawaiian Gardens' residents.

A well-planned and coordinated public park system provides residents with opportunities for both active and passive recreation. The benefits of recreation on physical and mental health are well known, and it is the intent of the City to offer community residents every opportunity to achieve physical and mental health goals through recreation.

2.2.1 Park Standards

The National Recreation and Parks Association (NRPA) publishes standards for both parks and specialized facilities such as game courts, athletic fields, and the like. Standards for parks are commonly expressed in a ratio of the number of acres of park land per 1,000 population. The nature of the ratio allows sensitivity to population densities.

A commonly accepted minimum standard is four acres per one thousand people (adopted by Los Angeles and Orange Counties). The Southern California Association of Governments has established a "Priority Tool" figure of 2.5 acres of recreational land per 1,000 people, for purposes of determining priorities for needed projects.

In order to ensure that City residents, now and in the future, are provided with sufficient park land to meet recreation needs, the figure derived by SCAG (2.5 acres/1,000 people) will be utilized to determine high priority areas within Hawaiian Gardens. The ratio of 4 acres per 1,000 persons will be utilized for future planning purposes. Using these figures, high priority open space acreage, to accommodate the 1990 population of 13,639, should be 34 acres. The projected population of 16,900 by the year 2012 sets the goal for future open space provisions within the City of Hawaiian Gardens at 42.25 acres.



Class I Bikeway: for the exclusive use of bicycles.



Class II Bikeway: adjacent to, but separate from, automobiles and pedestrian traffic.



Class III Bikeway: a shared bikeway in which the bicycle occupies the same right-of-way with automobile or pedestrian traffic.

CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

BIKEWAY CLASSIFICATIONS

OPEN SPACE/RECREATIONAL ELEMENT

LOCKMAN &
ASSOCIATES

1

FIGURE

Existing open space within Hawaiian Gardens incorporates both public and private school lots, and public and semi-public park and open land area. The total acreage of public park land within Hawaiian Gardens is 38.76 acres. School system lots make up the majority of open space acreage within Hawaiian Gardens, comprising a total of 20 acres (Table 1). El Dorado Park is not included in this figure as this is considered a regional, rather than a local, facility.

TABLE 1
AVAILABLE RECREATIONAL ACREAGE

Total Park acreage in City	3.26
School recreational acreage available	20.00
Available local park acreage outside the City	<u>15.50</u>
Total local park acreage available to City residents	38.76

The total public open space acreage of 38.76 acres meets the required needs of the existing population, but falls 3.49 acres short of projected priority needs in 2012. Other factors also need to be considered in planning for future parks. Climate, age make-up of the population, availability of regional recreation facilities all affect when, by whom, and how frequently parks will be utilized.

2.2.2 Park Types

Parks can be categorized by location, spatial requirements, and facilities. The schematic diagram in Figure 2 summarizes standards and facilities within community, neighborhood, and sub-neighborhood categories. Parks in Hawaiian Gardens have been placed in one of three general categories: community parks, neighborhood parks, and sub-neighborhood parks.

2.2.2.1 Community Parks

A community park is a walk-in, drive-to park and it serves several neighborhoods. A typical community park may include some or all of the following:

- | | |
|---------------------------------|-------------------------|
| a. Swimming pool | f. Play apparatus areas |
| b. Sports fields - lighted | g. Restrooms |
| c. Recreation/activity building | h. Offstreet parking |
| d. Tennis courts | i. Service yard |
| e. Picnic areas | |

Mini Park

Park Signage

Open Play Area

Tot Lot

Seating Area



Neighborhood Park

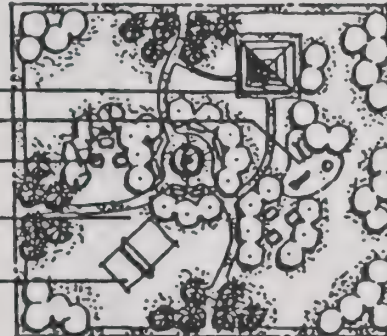
Restrooms

Tot Lot

Picnic Area

Central Fountain
with Seating

Volleyball



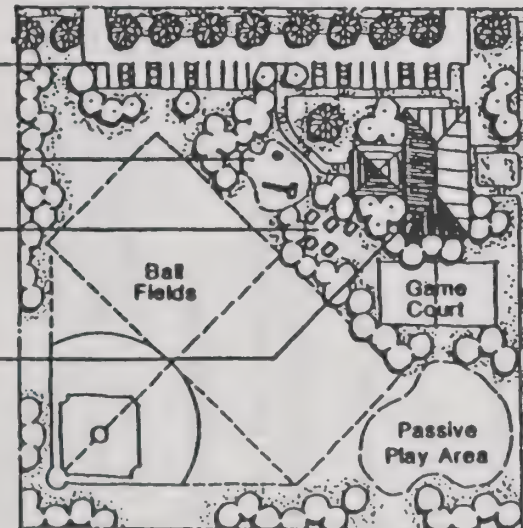
Community Park

Parking

Tot Lot

Picnic Area

Community Center



Service Area Radius

	Tot Lot	Picnic Area	Passive Area	Restrooms	Basketball	Volleyball	Tennis	Baseball	Soccer	Community Center	Nature
1/4 mi.	○	○	○								
1/2 mi.	○	○	○	□	□	□	□	◇	◇		
1 - 2 mi.	○	○	○	○	□	□	□	□	◇	◇	



Facility Should be Included in All Parks



Facility May be Included in Park



Facility Will be Limited to a Few Parks

CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

PARK STANDARDS

OPEN SPACE/RECREATIONAL ELEMENT

LOCKMAN &
ASSOCIATES

2

FIGURE

2.2.2.2 Neighborhood Parks

A neighborhood park is primarily a walk-to park, intended to provide near-at-hand recreational facilities and to serve as a neighborhood focal point. In general, a neighborhood is an area served by an elementary school. It serves a population of 2,500 to 5,000 persons and has a service radius of 1/2-mile. A neighborhood recreation center may be a combination school and recreation park that provides space for outdoor and indoor recreation activities under supervision. Some neighborhood recreation centers, however, may be on sites that are not contiguous with schools.

The site should be within walking distance of the homes within the neighborhood. Each neighborhood should be served by a neighborhood park or park playground. The amenities of each neighborhood park should be determined by the particular needs of the individual neighborhoods.

A neighborhood park should be designed to provide the basic walk-to recreational type facility and open space to serve the day-to-day needs of the specific neighborhood. A typical neighborhood park may include some or all of the following:

- a. Play tot lot;
- b. Paved area for court games;
- c. Field for sports (possibly in conjunction with school playground, provided sites are contiguous);
- d. Family picnic and barbecue area;
- e. Open space for free play;
- f. Neighborhood center facility;
- g. Quiet area;
- h. Off-street parking; and
- i. Landscaping (30% of site, plus transition area and perimeter buffer).

2.2.2.3 Sub-Neighborhood Parks

Because of the difficulty of providing full-sized neighborhood and community parks in built-out cities, it is usually the policy of the City to establish smaller recreational areas. Such smaller areas may take the form of mini-parks, play lots, or tot lots as defined below:

- a. Mini-Park

Usually less than one acre in size, may be designed to serve children only, senior citizens only, or all age groups, depending on the needs of the neighborhood. The size and locations are determined more by the availability of vacant land than any other factor.

b. Mini-Play Lot

A small area intended for children up to six or seven years of age. It is essentially a substitute for the backyard and, thus, is usually provided in high density areas. Play lots range in size from 2,500 square feet up to one acre and usually feature play apparatus, a paved area for wheel toys, benches, sand areas, and landscaped treatment. Children should not be required to cross a major arterial street to reach a play lot.

c. Tot Lot

Play area for small children, generally consists of a sand area, play equipment, and a shady sitting spot for mothers and/or fathers, usually located within a neighborhood or community park.

3.0 OPEN SPACE/RECREATION PLAN

The Open Space/Recreation Plan, as an element of the General Plan for the City of Hawaiian Gardens, has two fundamental characteristics which are mandated by State law. First, it must be generalized, comprehensive, and long range. Second, it must be directed primarily toward the preservation and proper management of those open spaces now in existence.

The Open Space/Recreation Plan for the City of Hawaiian Gardens, as proposed herein, consists of two distinct but intimately interrelated parts which correspond to the characteristics discussed above: 1) the existing open-space areas in Hawaiian Gardens; and 2) the framework of future major open space facilities/areas and linkages.

The two components described in Section 2.0 (Mixed-Use Open Space and Active Open Space) are combined within the Open Space/Recreation Plan. The Open Space/Recreation Facilities Map (Figure 3) illustrates the diversity of existing and potential open space and recreational opportunities that are available in Hawaiian Gardens. Indicated on the map are locations throughout the City that relate to the aforementioned components. These are described as follows:

3.1 Hawaiian Gardens' Mixed-Use Open Space

Flood control channels may serve alternatively as hike/bike trails, parks and playfields, and provide visual relief from the urban environment. The Open Space/Recreation Element focuses on identifying corridors and other easements that provide multi-use recreational potential. These areas can provide, where feasible, linkages to existing bicycle routes and regional trails. Completion of a comprehensive system will expand recreation opportunities in the City and reduce dependence on the automobile.

3.2 Hawaiian Gardens' Active Use Areas

Existing and Proposed Parks - included are existing parks within the City's park system.

School Yards - may act alternatively to serve neighborhood recreational needs. It is recommended that no additional schools be converted to residential structures, but retained for future open space needs.

Bicycle Trails - includes existing trails and those proposed within adopted specific plans. Some trails indicated serve both bicycling, hiking, and equestrian uses.

Future open space and recreation needs within the City will be determined by adopted park and site selection standards. Sites for larger community and neighborhood parks are limited. Emphasis shall be for provision of sub-neighborhood types of parks. The locations and types of these sub-neighborhood parks will require additional study. The need for these types of parks will be especially critical in infill areas and around areas designated for multi-family housing.

The pattern of existing open space needs interpretation in order to derive a framework for future planning and actions. The illustrations of major open space nodes and linkages on the Open Space/Recreation Facilities Map describes in generalized terms the recommended future program.

CITY OF HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

- 1 = Bloomfield Park
- 2 = Killingsworth Junior High School
- 3 = Robert Lee Activity Center
- 4 = Pioneer Park
- 5 = Clarkdale Park
- 6 = Furgeson Elementary School
- 7 = Lee Ware Park

EXISTING RECREATIONAL FACILITIES

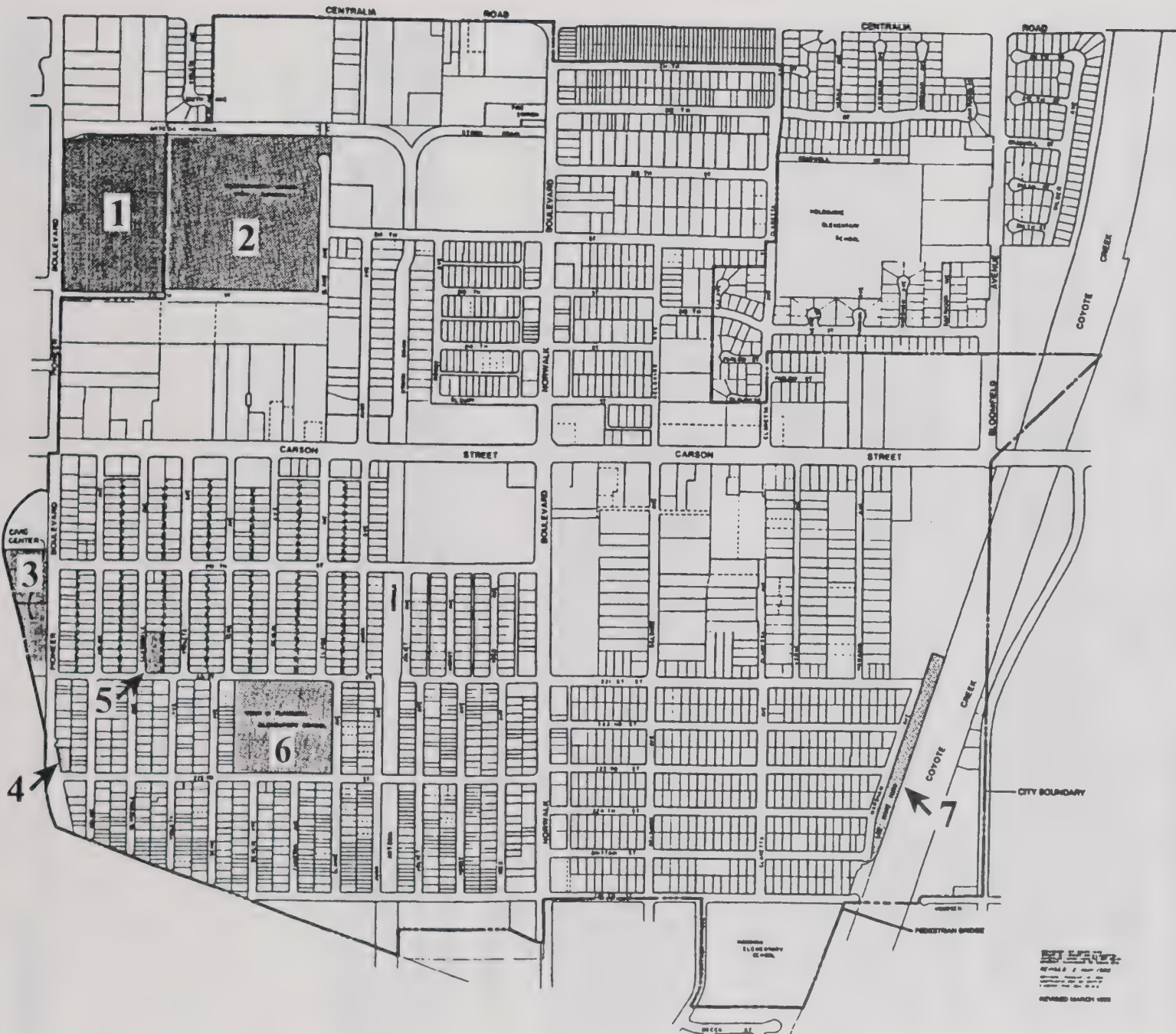
OPEN SPACE/RECREATIONAL ELEMENT



LOCKMAN &
ASSOCIATES

3

FIGURE



3.3 Inventory of Facilities

The City of Hawaiian Gardens currently maintains three parks. These are Clarkdale Park and Pioneer Park in the southwestern portion of the City, and Lee Ware Park in the City's southeastern corner. The City also operates a community recreation center at the Civic Center complex. Joint use agreements are in effect between the City and School District to allow for public recreational use of two school sites -- Killingsworth Junior High School and Venn W. Furgeson Elementary School. The locations of the local parks are shown in Figure 3 and are described below and in Table 2. In addition, two parks located outside Hawaiian Gardens are conveniently available to City residents: Bloomfield Park (Lakewood) and El Dorado Park (Long Beach) (Figure 3).

3.3.1 Pioneer Park

This minipark is intended to serve a very localized neighborhood population. The 0.17-acre site contains children's play equipment and a passive area with lawn and trees. Its service area extends approximately to 219th Street to the north, and Seine Avenue to the east. The park is in close proximity to Clarkdale Park, Furgeson Elementary School and the Civic Center.

3.3.2 Clarkdale Park

Clarkdale is a minipark situated on a 0.69-acre site. Facilities within the park include a lighted basketball court, playground equipment, a fountain with seating, restrooms and a lawn area. This park contains a greater number of facilities than found in many miniparks. Its service area probably extends north to Carson Street and east almost to the Artesia-Norwalk Storm Drain Channel. Pioneer Park, the Civic Center, and Furgeson Elementary School are close by.

3.3.3 Lee Ware Park

Lee Ware is a small neighborhood park serving the southeastern portion of the City. Uncharacteristic of a neighborhood-level facility, this park contains two community-level facilities, an outdoor swimming pool and a community building containing a Los Angeles County health center. Both of these facilities have a larger service area than the park itself. Other facilities include a playground, a basketball court and outdoor handball courts. The park contains very little passive landscaped area. This park is located on a linear, 2.4-acre site adjacent to the Coyote Creek Channel.

3.3.4 Venn W. Furgeson Elementary School

The Furgeson Elementary School facilities serve as a neighborhood park for the southwestern quadrant of the City. Approximately five acres of the 7.5-acre school site are available for outdoor recreation. The school grounds contain two lighted baseball fields, a large lighted playfield, playground equipment, hard courts for basketball and handball, and a restroom building near 221st Street.

TABLE 2
INVENTORY OF RECREATIONAL FACILITIES

Park or Facility	Classification	Size (acres)	Facilities
Pioneer Park	Mini-park	0.17	Play equipment.
Clarkdale Park	Mini-park	0.69	Play equipment, basketball, fountain, restrooms.
Lee Ware Park	Neighborhood park	2.4	Pool, community building, play equipment, basketball, outdoor handball.
Furgeson Elementary	School/neighborhood park	approx. 5*	Lighted baseball, lighted playfield, play equipment, basketball, handball, restrooms.
Killingsworth Jr. High	School/neighborhood park	approx. 15*	Lighted playfield, lighted baseball, basketball, volleyball, tennis.
C. Robert Lee Activity Center	Community facility		Gymnasium, boxing, gymnastics, tennis racquet/handball, basketball, locker rooms, multi-purpose rooms, kitchen, senior center.
Bloomfield Park (City of Lakewood)	Community park	15.5	Lighted baseball, shuffleboard, lighted basketball, play equipment, picnic area.
El Dorado Park (City of Long Beach)	Regional park	400+	

* Only includes that portion of the site available for outdoor recreation.

3.3.5 Killingsworth Junior High School

Under a joint use agreement, Killingsworth Junior High School provides a large amount of playfield and park space for the northwestern portion of the City. Facilities at the school grounds include a lighted playfield, several baseball fields (two lighted), and hard courts for basketball, volleyball and tennis. The school site is 20.1 acres in size, of which approximately 15 acres are available for outdoor recreation. Bloomfield Park is located directly west of the school grounds.

3.3.6 C. Robert Lee Activity Center

The C. Robert Lee Activity Center, located at the Civic Center, provides the City with a high-quality, multi-purpose community facility and a Senior Citizen Center. Recreational facilities include a gymnasium with bleachers and a stage, boxing ring, gymnastics room, racquet/handball courts, two tennis courts, an outdoor basketball court, a game area and locker rooms. Other facilities include a large multi-purpose room, a smaller meeting room, a kitchen and a social service office. The Activity Center serves the entire City.

3.3.7 Bloomfield Park (City of Lakewood)

Bloomfield Park is located on Pioneer Boulevard just outside the Hawaiian Gardens' city limits. It can be classified as either a neighborhood park or a small community park, with a service area encompassing the entire northwestern half of the City. The park contains two lighted baseball fields, a hardcourt for shuffleboard and lighted basketball, playground equipment, a picnic area and a large passive area. It is situated on a 15.5-acre site immediately adjacent to the Killingsworth Junior High School playfields.

3.3.8 El Dorado Park (City of Long Beach)

El Dorado is a regional park located immediately southwest of Hawaiian Gardens on the west side of the San Gabriel River Freeway. This 400+ acre park contains a variety of active and passive recreational facilities in a naturalistic setting. Included within the park are several lakes, camping and picnic areas, playfields, playgrounds, bike paths, hiking trails and a nature center. El Dorado Park serves a large area which includes Hawaiian Gardens and numerous other communities in the vicinity.

3.3.9 Open Space

Other than the established parks and school grounds, no usable open space exists within the City. The small amount of vacant land in the City consists of relatively small parcels surrounded by developed properties. None of the parcels are maintained in a state which could be considered to constitute a natural or recreational amenity. Technically, the two Los Angeles County Flood Control channels which transect the City can be considered open space as they will remain as open area as long as they serve their public safety purposes. At the current time, the Artesia-Norwalk Storm Drain provides no natural amenity for City residents, but may have the potential to be developed for recreational purposes such as bikeways. The Coyote Creek Flood Control Channel presently has a bike path, and the City is working to link this bike path to Lee Ware Park via an existing bicycle/pedestrian bridge.

3.4 Opportunities for New Facilities

3.4.1 Public Facilities

The Open Space/Recreation Plan designates six major Open Space/Recreation Facilities, all of which are presently in existence. New facilities may include a small park south of Carson Street between Verne and Hawaiian Avenues, a park/public facility in the area of 213th and 214th Streets, east of Norwalk Boulevard, and joint use of the western portion of Hawaiian Elementary School.

The Open Space/Recreation Plan proposes to enhance all facilities by:

- a. Preserving these areas in perpetuity for park, recreation and open space uses;
- b. Preventing the intrusion of any uses or activities which are not clearly of a public nature and of benefit to the public at large;
- c. Controlling land uses around the facilities so that possible future effects which could lead to environmental, social or aesthetic degradation of the area, or its usefulness to people, can be identified and prevented;
- d. Considering methods by which utilization and enjoyment of the areas can be improved;
- e. Maintaining the present foliage at a high level, and improving the quality and quantity of vegetation where and when appropriate; and
- f. Consideration of additional facilities in the Civic Center area.

3.4.2 Major Linkages

The two linkages designated on the Open Space/Recreation Facilities Map consist of linear rights-of-way easements that could be developed as bicycle paths. These include the Artesia-Norwalk Storm Drain, that traverses nearly the entire city from north to south, between Juan and Joliet Avenues, and the Coyote Creek bikepath, along the City's eastern boundary. These two could be linked by a designated bike path along 226th Street.

The Open Space/Recreation Plan proposes to preserve and improve other linkages by:

- a. Working to develop Class III Bikeway linkages on major streets to interconnect with the Coyote Creek Bikepath and the San Gabriel River Bikepath;
- b. Developing methods for overcoming design and safety problems;
- c. Establishing a desired route through the developed portions of the City; and
- d. Working with other agencies to bring the plan to fruition.

Where the Open Space/Recreation Plan proposes to include utility rights-of-way and/or properties, permission for use will be by the granting of a license, with reasonable terms and conditions, from the utility. Permitted uses of such properties will not be planned which would interfere in any way with the use of such land for designated purposes.

3.4.3 Private Facilities

The Open Space/Recreation Plan recognizes that some private open space exists within the City, associated with apartments and condominiums that contain recreational facilities such as swimming pools, health clubs, and play areas. These facilities are most frequently found in newer, larger multiple-unit building complexes.

It has become routine for developers to design open space into residential, commercial, and industrial improvements. This practice is further encouraged by the City in the Land Use Element of the General Plan. Minimum guidelines and standards for such developments will be reviewed to maintain a high level of quality in Hawaiian Gardens developments.

4.0 STREETSCAPE AND URBAN DESIGN

The visual and physical character of the City of Hawaiian Gardens has been repeatedly cited as a significant issue by residents and business persons. Thus, the City intends to establish goals, objectives, policies, standards, and programs to influence the character of individual buildings, relationships among buildings and interconnecting open spaces. Essentially, urban design defines the manner by which individual development projects can fit together into a unified whole. These considerations, as they apply to the development of buildings, are addressed in the Land Use Element and in the Commercial Rehabilitation Design Guidelines, December 1984. The application of urban design policy to public open spaces is defined in this section.

The streetscape environment of the City of Hawaiian Gardens has resulted from the application of minimum public standards for the design and development of streets, sidewalks, parkways, landscape, furniture, lighting and signage. Recently, the City has been undertaking a program to install new, attractively designed street furniture, landscaping, and other pedestrian amenities along Carson Avenue.

In general, Hawaiian Gardens contains moderate to minimal amounts of street landscaping depending on location and use. Residential neighborhoods have the greatest amount of trees and parkway vegetation. However, a number of streets developed with high-density apartments contain few street trees or other landscaping. Commercial corridors vary substantially in the types, density, and quality of landscape. Some buildings have incorporated landscaping and planters along their frontages, while many others contain none.

4.1 Significant Open Space and Streetscape Issues

The general absence of an attractive streetscape environment detracts from the pedestrian activity which exists in many locations within Hawaiian Gardens. Where individual property owners have attempted to enhance the street environment by providing their own planters, benches, and other amenities along the sidewalks, the pedestrian activity, character and image of the City have been significantly enhanced.

Concerns regarding the installation of additional streetscape improvements include:

1. Width of existing sidewalks in some locations is generally narrow, limiting the amount of street furniture and landscape which can be installed while maintaining pedestrian flow and safety;
2. Some bus shelters and benches located on narrow sidewalks constrain pedestrian movements. Visually-impaired or distracted persons may find these elements to be hazardous along their paths;
3. The design of streetscape (furniture and landscape) can affect visibility and access to businesses located along the sidewalks;
4. Costs of streetscape improvements may be, cumulatively, substantial. The use of general revenue funds are usually insufficient, and must be allotted to other, higher priority, programs (e.g., human services and housing); and

5. Many streets within the City of Hawaiian Gardens have above-ground utility lines. Utility lines and poles require continual maintenance, are visually unattractive and, often, are covered with excessive signage. This is especially true of Norwalk Boulevard.

5.0 GOALS AND POLICIES

Based on the definitions and functions of Open Space and Recreation as outlined in the previous sections, the following goals, objectives and policies for the Open Space/Recreation program have been formulated. These statements are the basic criteria to be considered in effectively realizing the Open Space/Recreation Plan for the City of Hawaiian Gardens. These address each of the following fundamental issues:

- A. Street landscape;
- B. Pedestrian improvements;
- C. Supply of parks, recreational facilities and programs;
- D. Public signage;
- E. Financing;
- F. Public, private and regional resource coordination; and
- G. Safety and accessibility.

GOAL 1

Improve the process for updating open space plans and programs and strengthen participation by citizens, elected officials and technicians.

ISSUE A - Street Landscape:

Objective 1.1

Provide for the consistent use of trees along all sidewalks and property frontages.

Policies

- 1.1.1 Provide for the consistent use of street trees to identify City streets, residential neighborhoods, commercial districts, and entry points into the City, while considering and respecting the species and character of the existing street trees.
- 1.1.2 Formulate a master plan defining the types and spacing of trees along all public sidewalks and streets.
- 1.1.3 Select species which (a) convey a distinctive and high quality visual image for the City's streets, (b) are drought- and smog-tolerant, fire-resistant, and pest-resistant, (c) require low maintenance and no pesticides; and, (d) complement existing street trees.
- 1.1.4 Establish a hierarchy for the street trees which shall include:

- a. Accent Trees, which are to be located at key entry locations, intersections and activity centers. Species should be of a grand scale to differentiate these key locations.
 - b. Street Tree species, which should be the common tree for the street frontages. A single species may be selected for all residential neighborhoods and commercial districts or different species selected to distinguish one neighborhood, district, or street from another. In residential neighborhoods, the trees should be full, to provide shade and color. In commercial districts, the trees should be more transparent to promote views of storefronts and visual interaction of pedestrians.
- 1.1.5 Require that all new development install street trees in accordance with a Tree Plan identified in Policy 1.1.2.
- 1.1.6 Require developers of significant projects to install street trees along the sidewalks of adjacent properties where such trees do not exist or contribute fees to a Street beautification trust fund.
- 1.1.7 Encourage community groups to participate in planting new street trees where they do not exist.
- 1.1.8 Require that street trees be adequately maintained and replaced if removed due to damage or health.
- 1.1.9 Require that all street landscape incorporate an irrigation system to provide proper watering.
- 1.1.10 Adopt a city-wide tree trimming and pruning master plan, which cultivates the full potential of street trees as providers of shade and designators of key design corridors.

ISSUE B - Pedestrian Improvements:

Objective 1.2

Establish a high quality visual and functional environment along the City's streets to stimulate pedestrian activity.

Policies

- 1.2.1 Undertake a comprehensive program to improve the City's streetscape environment, beginning in one or more selected districts and expanding city-wide.
- 1.2.2 Install new street furniture where it does not impede pedestrian activity or physical and visual access to buildings and which is aesthetically pleasing, including such elements as bus and pedestrian benches, trash receptacles, public telephones, and landscape planters.
- 1.2.3 Design the distribution of street furniture to provide a clear and unified organization for pedestrian walking and activity spaces.

- 1.2.4 Provide street furniture which is coordinated in design and sufficient to meet the needs of pedestrian activities, and which discourages sleeping on benches.
- 1.2.5 Select street furniture which is functional in form, and simplified and standardized in appearance.
- 1.2.6 Install new street lights in commercial districts which are pedestrian-oriented, attractively designed, compatible in design with other street furniture, and provide adequate visibility and security.
- 1.2.7 Establish a consistent lighting program with sufficient flexibility to modify certain areas for special activities and functions.
- 1.2.8 Clearly mark, maintain, and replace crosswalks where they are appropriate and necessary to safely accommodate pedestrian activity.
- 1.2.9 Consider the development of sidewalk "pull-outs" at intersections, where they do not adversely impact traffic flow or safety, by extending the sidewalk to the depth of a parking stall, to accommodate landscaping and street furniture and reduce the width of the crosswalk.
- 1.2.10 Require that all sidewalks, crosswalks, street furniture and other open space amenities be designed to accommodate the physically impaired.
- 1.2.11 Require the long-term maintenance of sidewalks and streetscape amenities.
- 1.2.12 Remove parking stalls at selected locations when other parking is available along commercial streets to accommodate additional landscape and street furniture.
- 1.2.13 Require the inclusion of pull-out areas for private vehicle and public transit passenger drop-offs in large-scale development projects and locate these so that they do not impede traffic flow or parking access.
- 1.2.14 Require that cul-de-sacs used to restrict travel through residential neighborhoods be aesthetically designed to complement adjacent uses and incorporate landscape, benches, and other pedestrian-oriented amenities.

GOAL 2

Achieve a balanced distribution of Open Space/Recreation facilities throughout the City which meets the needs of the community for recreation, relief from the urban development, a more enjoyable environment, and which will prevent some of the adverse effects of urban sprawl and other forms of inappropriate development.

ISSUE C - Supply of Parks, Recreation Facilities and Programs:

Objective 2.1

Provide a diversity of programs and facilities to meet the needs of all individuals and groups in Hawaiian Gardens, with special attention to the elderly, handicapped, and economically disadvantaged.

Policies

- 2.1.1 Conduct ongoing needs assessment and evaluation of demands for recreational activities and public meeting facilities, and modify programs where necessary to meet these demands, provided that adequate funding is available.
- 2.1.2 Develop recreational facilities and programs to meet the needs of all population segments - the young, families, seniors, ethnic populations, and those with special needs.
- 2.1.3 Accommodate unique social, cultural, and ethnic needs in the design and programming of recreational spaces and facilities, considering especially the needs of children, elderly, disabled, and female-head of households.
- 2.1.4 Notify the City's residents of the types of recreation and programs available, and encourage their participation.
- 2.1.5 Incorporate areas for both active and passive recreation in parks and facilities and ensure that these are accessible to all age groups, as practical.

Objective 2.2

Provide additional park land and recreational facilities and programs which meet the needs of the residents of the City of Hawaiian Gardens.

Policies

- 2.2.1 Establish a system of neighborhood parks within convenient walking distance of all urban areas, improving the standards of park space per resident through public and private acquisitions and improvements.
- 2.2.2 Preserve existing park space and recreational facilities, especially open turfed areas and trees, while allowing for the redesign, reconfiguration and replacement of existing spaces and facilities to increase their recreational potential and usability.
- 2.2.3 Ensure that sub-neighborhood parks be designed to meet the particular needs of the area they serve (e.g., seniors, families with children).
- 2.2.4 Establish as a priority for public funding, the acquisition and development of parks and recreational facilities in neighborhoods in which there is a shortage of parks.
- 2.2.5 Require that new residential development provide recreational or open space facilities onsite, or contribute fees to the public development of additional facilities to offset additional demands generated by its resident population.
- 2.2.6 Allow for the development of common recreational facilities as a portion of the open space requirements of multi-family residential projects.

- 2.2.7 Require that new commercial development provide open space facilities onsite for passive or active recreation, or contribute fees for the development of such uses.
- 2.2.8 Incorporate "hard" recreational facilities (i.e., tennis and basketball courts) into new parking structures when developed on park sites.

ISSUE D - Public Signage and City Entries:

Objective 2.3

Develop a consistent and well designed program of public directional and informational signage.

Policies

- 2.3.1 Establish a consistent design vocabulary for all public signage, including fixture type, lettering, colors, symbols, and logos.
- 2.3.2 Provide signage which is adequately spaced and clearly visible during the day and night to control vehicular traffic, bicycles, and pedestrians.
- 2.3.3 Replace existing public signage with new fixtures which consolidate the diversity of signage information (parking, locational, traffic control, etc.).
- 2.3.4 Provide for distinctive signage which identifies principal entries to the City, unique locations, and public buildings and parks.
- 2.3.5 Provide for the use of well-designed and placed banners for City events, holidays, and other special occasions.
- 2.3.6 Ensure that public signage complements and does not detract from adjacent commercial and residential uses.

Objective 2.4

Establish clearly definable entries to the City of Hawaiian Gardens from adjacent jurisdictions.

Policies

- 2.4.1 Continue to provide improvements along principal streets at the City boundary with adjacent jurisdictions which clearly distinguishes these as major entries to the City, including elements such as signage, landscape clusters, and other distinctive elements.

GOAL 3

Promote and insure the development and maintenance of neighborhood and community parks and recreation facilities to meet the needs and desires of all the people of the community.

ISSUE E - Financing:

Objective 3.1

Ensure that the costs for all parks, recreation facilities and programs are borne by those who benefit and contribute to additional demands.

Policies

- 3.1.1 Require that developers contribute to provide parks and recreational facilities to offset additional demands brought about by new development.
- 3.1.2 Collect Quimby Act fees to provide additional funding through residential development.
- 3.1.3 Adopt and implement an official park acquisition program to meet future needs, including direct input for capital budgeting purposes, scheduling of Quimby Act funds, and periodic reviews of changing growth rates and General Plan policies.
- 3.1.4 Establish a formal mechanism by which the City may accept gifts and dedications of parks and open space.
- 3.1.5 Consider the use of eminent domain to acquire additional park land where the need for parks and recreation facilities is greatest, provided that the City's housing supply is not adversely affected.
- 3.1.6 Consider the sale of bonds or use of redevelopment funds as a means of generating funds for parks and recreation services.

ISSUE F - Safety, Maintenance and Accessibility:

Objective 3.2

Ensure that all open space and recreational resources within the planning area are landscaped and maintained to promote a high quality of recreational experience.

Policies

- 3.2.1 Encourage variety in the design of park facilities to enhance the lifestyle of residents to be served.
- 3.2.2 Install new and replace existing landscaping where it is severely deteriorated, inappropriately located for park activities, and incompatible with other landscape and adjacent uses.

- 3.2.3 Develop master plans for each park to ensure that: (a) new development of buildings, open facilities, and landscape is unified, functionally related to improve efficiency, and compatible with adjacent uses; and (b) landscape locations and species are coordinated with architectural and site design.
- 3.2.4 Monitor and review design, landscape development, and maintenance of parks. Ensure that quality standards are established which consider the intended function of recreation resources and their impacts on surrounding areas.

Objective 3.3

Ensure that parks and recreational resources are accessible and safe for their users, and compatible with adjacent residences and commercial uses.

Policies

- 3.3.1 Ensure that all parks are adequately illuminated if they are used at night.
- 3.3.2 Provide for the supervision of park activities and promote enforcement of codes restricting illegal activity.
- 3.3.3 Continue coordination of park security between the Parks and Recreation Department and the Sheriff's Department to insure that they are adequately patrolled.
- 3.3.4 Design and site park activities, buildings, outdoor facilities, people-gathering areas, lighting, parking areas, and other elements so that they do not adversely affect adjacent uses.
- 3.3.5 Restrict and control nighttime park use so that adjacent residences are not adversely affected.

GOAL 4

Develop open space plans and programs in close cooperation with appropriate County, City and private agencies, to establish procedures to bring about more effective communication and cooperation.

ISSUE G - Public, Private and Regional Resource Coordination:

Objective 4.1

Increase existing provision, development of and access to local and regional open space resources by coordination with appropriate City, County and private agencies.

Policies

- 4.1.1 Encourage the ABC Unified School District to continue to make the playgrounds, play fields, and auditoriums of Hawaiian Gardens' schools available to local residents for recreational use after school hours and on weekends.

- 4.1.2 Participate in the upgrading of Hawaiian Gardens' schools open spaces for public recreational use, provided that such improvements do not impair the security of school facilities.
- 4.1.3 Designate flood control channels and transportation right-of-ways as major elements of the open space/recreation network, in conjunction with fee owners. This network shall provide a link with other open spaces and recreational areas within the City and with adjacent city and county recreation plans.
- 4.1.4 Encourage the development of recreation programs by non-city public and private education and sports organizations to involve more children and adults in outdoor recreation activity; use volunteers to operate and maintain programs whenever possible.

6.0 IMPLEMENTATION PROGRAM

A very important aspect of the Open Space/Recreation Element is implementation of the recommendations set forth in the document. Even the most innovative and comprehensive plan cannot succeed unless appropriate actions are taken to preserve the existing inventory of open spaces in the community. Additionally, it is paramount that flexible methods of open space acquisition and techniques of creating new open spaces be employed. The latter is especially true in an urbanized area such as Hawaiian Gardens where the population is slowly climbing, leisure hours are increasing, and more recreationally-oriented demands are being made by the residents.

The land areas identified in the Open Space/Recreation Plan are considered to be the open spaces that are of principal significance in Hawaiian Gardens. These major open space areas are: parks, school grounds, bikeway linkages and private open space.

The recommendations contained in the Open Space/Recreation Plan are concerned with avoiding degradation by overuse, mismanagement, and urban encroachment of the resources and open space opportunities listed above. However, because of time constraints and financial limitations, immediate implementation of each of the recommendations is readily acknowledged to be unfeasible. Therefore, primary consideration must be given to preserving and conserving those open spaces that are the most critical.

The following list of programs shall be carried out by the City of Hawaiian Gardens to implement the above goals, objectives and policies of the Open Space/Recreation Element.

6.1 Recreation Programs, Parks and Facilities Action Programs

- A. Require open space/recreation areas with all new development.
- B. Establish new neighborhood and sub-neighborhood parks.
- C. Identify neighborhoods currently not served with sufficient amounts of park land and recreational facilities. Concentrate efforts and available resources to add parks or recreational facilities in these areas.
- D. The City shall annually develop, implement and monitor recreational programs at City parks and other available recreational resources. This will include the following:
 - 1. Review of the demographic characteristics of City residents and recreation users;
 - 2. Evaluation of the level of service and demands at existing facilities;
 - 3. Conduct public hearings on the adequacy of parks and recreation services and facilities; and
 - 4. Preparation of five-year comprehensive community surveys and market analyses to assess needs and demands.

Based on the evaluation of needs, an annual recreational program shall be developed.

6.2 Street Landscape Action Programs

- A. The City shall prepare a master streetscape planting plan for all street frontages within Hawaiian Gardens, primarily the major traffic corridors of Norwalk Boulevard, Carson Street, Pioneer Boulevard, Bloomfield Avenue, and 221st Street. This plan will specify permitted species, minimum size, and irrigation requirements.
- B. The City should work and coordinate the planting of street trees with community groups. Private organizations, such as the "Tree People", will acquire and plant trees at the direction of and in coordination with local governments. Other local groups could also be encouraged to participate.
- C. The City shall allocate funds for the installation of street trees along street frontages where they have been removed or never existed, and when it is anticipated that there will be no new development activity which would result in their implementation. Revenue sources may include the General Fund, exactions from new development projects, streetscape benefit assessment districts, and/or tax increment generated by new development in redevelopment project areas.
- D. Zoning and subdivision ordinances shall be revised to provide for the standards and requirements of the Street Tree Plan and Open Space/Recreation Element policy requiring developers of significant projects to provide off-site trees or contribute an in-lieu fee to a street beautification fund.

6.3 Pedestrian Improvement Action Programs

- A. The City shall prepare streetscape installation plans. These should include:
 - 1. Identification of priority improvement locations;
 - 2. Detailed specifications for design elements, street furniture, landscaping, lighting, and other amenities;
 - 3. Accommodations for physically impaired; and
 - 4. Cost estimates.
- B. Identification of streetscape priorities within the City. Specifications should actively involve the input of residents, business people, and local associations and groups.
- C. The City shall annually allocate funds for the maintenance of streetscape improvements. These may be derived from General Funds, maintenance districts and/or redevelopment tax increments. A procedure should be established by which the maintenance of the streetscape can be effectively monitored. This may include periodic inspections by City staff, resident and business person complaints, or other appropriate techniques.

- D. Establish specific open space requirements in all land use zones for new development, including:
1. Minimum setbacks;
 2. Required percentage of open space; and
 3. Outdoor living areas.

6.4 Public Signage and City Entry Action Programs

- A. The City shall prepare a public signage plan for Hawaiian Gardens. This should include specifications for design (size, color, materials, logo, etc.) and locations. It is intended that the signage provide an attractive, well designed, and coordinated system of public information, and consolidate, as feasible, the diverse public signage onto fewer fixtures.
- B. The City shall prepare comprehensive plans for the installation of improvements which provide unique identity to entry points and principal districts of Hawaiian Gardens. This shall include the specification of the design improvements to be used (e.g., signage, plaques, landscape, and monuments), and their locations.

6.5 Open Space Financing Action Programs

- A. Establish a dedication program where the City may accept gifts of park land and/or recreational facilities.
- B. Amend the Zoning Ordinance to require that all development projects provide onsite pedestrian-oriented open space facilities or pay in-lieu fees for similar facilities nearby.
- C. Require that developers of apartment or condominium projects provide a minimum proportion of recreational facilities as part of the Open Space requirements for such development.
- D. Establish and implement a park acquisition program to meet current and future needs. Such a program shall:
1. Identify potential park sites by monitoring real estate activity within the City. When a site is made available for donation, purchase, condemnation, or open space easement donation or purchase, the City should consider its appropriateness for use as a mini-park or, if contiguous with existing parks, as an extension of that park based on:
 - a. configuration and usability for park land;
 - b. costs of acquisition and improvements;
 - c. availability of revenue;

- d. compatibility with adjacent uses;
- e. loss of housing units; and
- f. site accessibility.

Public hearings shall be conducted when it is proposed that a site be acquired for park use.

2. Establish a trust fund to pay for the acquisition and development of new parks with the funds being derived from the following sources:
 - a. general revenue funds;
 - b. tax revenue fund (in Redevelopment Project Areas);
 - c. developer assessments (through use of the Quimby Act Ordinance and exactions of commercial developments);
 - d. business or fund-raising contributions;
 - e. Mello-Roos Community Facilities Act;
 - f. facilities bonding; and
 - g. State and Federal grants or loans.
3. Utilize the funds to acquire and develop sites identified above and/or historically and architecturally significant structures which can be adaptively reused for public facilities.
4. Use eminent domain to acquire additional lands for park development only when there is no feasible alternative, it is deemed in the public good, and the City's housing supply will not be adversely affected.
5. The City shall establish a program to fund the construction and installation of public open space improvements (signage, entryway identification, and streetscape). Revenue sources may include General Funds, general obligation bonds, exactions from new development projects, and/or tax increment generated by new development in redevelopment project areas. In addition, the City shall solicit funding from State and Federal sources for public improvements, as it is available in the future.
6. Adopt and implement a park land dedication ordinance with in-lieu fee provisions where residential developers contribute on a per-unit basis (per the Quimby Ordinance).

6.6 Safety, Maintenance and Accessibility Action Programs

- A. Continue and enhance cooperation between the Parks and Recreation Department and the Sheriff's Department regarding safety in parks.
- B. Continue to ensure that city parks are designed to be accessible and meet the needs of the elderly, handicapped, and other persons with special needs.
- C. Funds shall be allocated annually by the City for the upkeep and maintenance of public parks, facilities and landscape. A master plan shall be prepared which specifies the types of and schedule for tree trimming and pruning. This plan shall acknowledge design differences about the City.
- D. No less often than once every five years, review the site design, landscape development, and maintenance of parks, recreational buildings and community facilities. This evaluation should consider their effectiveness and efficiency in accommodating recreational activities, costs of operation and maintenance, rate of deterioration and replacement of equipment and landscape, safety of users and tenants of adjacent properties, adequacy of lighting and defensible space elements, compatibility with adjacent uses, and other pertinent measures.

6.7 Public, Private and Regional Resource Coordination Action Programs

- A. Investigate institutional land uses as providers or potential providers of open space and recreational uses and coordinate these resources with efforts to provide additional open space to areas in most need.
- B. Continue coordination with ABC Unified School District to ensure the availability of school recreational facilities for public recreation after school hours. Allocate City revenues to provide additional security for school facilities and upgrading of site recreational areas.
- C. Encourage private contributions to recreational programs vis-a-vis the Chamber of Commerce, Board of Realtors, religious organizations, and other local associations.
- D. Coordinate with private and public agencies for access to open space uses of easements within Hawaiian Gardens, and develop a comprehensive plan for bicycle and pedestrian pathways in the City connecting parks, schools, and existing bike paths.

CITY OF HAWAIIAN GARDENS
GENERAL PLAN UPDATE



**NOISE
ELEMENT**

NOISE ELEMENT

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	N-1
1.1 Purpose and Intent	N-1
1.2 Legal Requirements	N-1
1.3 Major Features of the Noise Element	N-2
2.0 FUNDAMENTALS OF NOISE	N-3
2.1 Noise Definitions and Assessment Criteria	N-3
2.2 Noise Assessment Metrics	N-3
2.3 Sound Propagation	N-5
2.4 Human Reactions to Sound	N-6
3.0 STATEMENT OF GOALS	N-11
4.0 STATEMENT OF POLICIES	N-12
5.0 EXISTING NOISE ENVIRONMENT	N-13
5.1 Noise Sensitive Receptors	N-13
5.2 Significant Noise Sources	N-13
5.3 Existing Noise Levels	N-13
5.3.1 Noise Measurements	N-13
5.3.2 Motor Vehicle Noise	N-16
6.0 FUTURE NOISE ENVIRONMENT	N-20
6.1 Significant Noise Sources	N-20
6.2 Future Noise Levels	N-20
6.3 Site Design Review	N-20
7.0 LAND USE COMPATIBILITY	N-24
7.1 Noise Compatibility Criteria	N-24
7.2 Noise Attenuation with Distance	N-24
8.0 NOISE MITIGATION MEASURES	N-27
8.1 General Methods to Reduce Noise Impacts	N-27
8.2 Land Use Policies and Recommendations	N-28
8.3 Enforcement Programs	N-32

TABLE OF CONTENTS

(Continued)

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Typical Noise Levels of Familiar Sources	N-4
2. Typical Noise Levels Versus Speed and Volume	N-8
3. Sensitive Receptors and Noise Measurement Locations	N-14
4. Existing Noise Level Contours	N-17
5. Future Noise Contours	N-23
6. Land Use Compatibility for Community Noise Environments	N-25

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Harmful Effect of Noise	N-9
2. Percentage of Persons Highly Annoyed Who Register Complaints as a Function of Ldn	N-10
3. Noise Measurement Locations & Results (dBA)	N-15
4. Existing Noise Levels	N-18
5. Future Exterior Noise Levels	N-21
6. CNEL Adjustment Factors	N-26
7. Land Use Compatibility with Noise - City of Hawaiian Gardens	N-29

1.0 INTRODUCTION

1.1 Purpose and Intent

The Noise Element is a statement of the City's policies and intentions regarding the relationship of land use to environmental noise and the control of noise sources within the community. Its purpose is to provide a framework within which future planning and noise mitigating decisions will be made and implemented. It is intended to represent the consensus of the community's goals and objectives pertaining to the control of environmental noise. In addition, the Noise Element is intended to provide a set of correlated procedural guidelines and criteria to be used by the City Planning and Engineering Departments to minimize noise conflicts in existing situations and in new developments.

1.2 Legal Requirements

The General Plan must include a Noise Element to identify and appraise noise problems in the community (Section 65302(f)). In recognition of the guidelines adopted by the Office of Noise Control, the element will be analyze and quantify, to the extent practicable, the current and projected noise levels of the following sources:

1. Freeways and highways;
2. Primary arterials and major local streets; and
3. Other ground stationary noise sources identified as contributing to the community noise environment.

Noise contours have been prepared for these noise sources, stated in terms of the community noise equivalent level (CNEL). The contours were prepared using the FHWA Highway Traffic Noise Production Model and noise monitoring data from areas considered noise sensitive, such as hospitals, schools, and medical facilities. The noise contours will be used as guidelines for the development of land uses in the Land Use Element that minimizes the exposure of residents to excessive noise.

Implementation of the Noise Element is to be achieved through improved planning and zoning regulations reflecting quantified noise criteria, development of noise abatement strategies, introduction of noise criteria in the Building Code, application of noise regulations controlling stationary and moving noise sources, and practical tools which can be used, for example, by the City's Planning Department and Building Department in the day-to-day activities of the city.

It is the responsibility of those preparing the General Plan to specify the manner in which the Noise Element will be integrated into the City's zoning plan, and tied to the land use and circulation elements and to the local noise ordinance. The Noise Element, once adopted, shall also become the guideline for determining compliance with the State's noise insulation standards.

1.3 Major Features of the Noise Element

The Noise Element consists of the following:

1. Statement of Goals - the City's intent regarding noise and noise sources;
2. Statement of Policies - the City providing direction for achievement of the goals;
3. Land Use Compatibility - the local and State noise guidelines, and how the City will integrate noise policies in local ordinances;
4. Existing Noise Environment - noise-sensitive receptors, significant noise sources, and existing noise levels;
5. Future Noise Exposure - levels from traffic and human activity;
6. Noise Attenuation Principles and Methods;
7. Conclusions and Recommendations; and
8. Provisions for Compatible Land Uses.

2.0 FUNDAMENTALS OF NOISE

2.1 Noise Definitions and Assessment Criteria

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the Decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter Scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud; and 20 dBA higher four times as loud; and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud). Examples of various sound levels in different environments are shown in Figure 1.

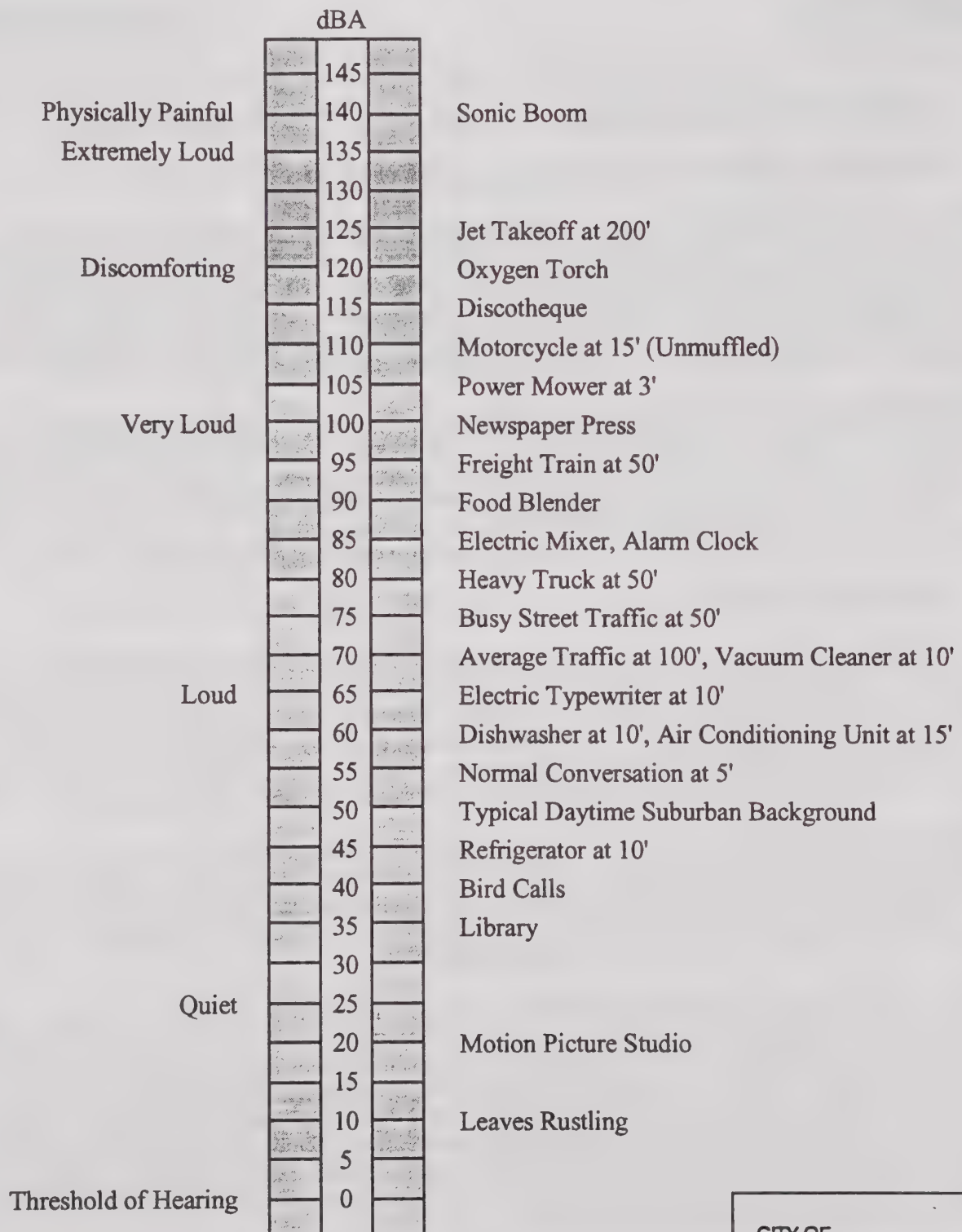
2.2 Noise Assessment Metrics

The description, analysis and reporting of community noise levels is made difficult by the complexity of human response to noise and the myriad of noise metrics that have been developed for describing noise impacts. Each of these metrics attempts to quantify noise levels with respect to community response. These noise metrics can be divided into two categories: single event and cumulative. Single event metrics describe the noise levels from a single noise occurrence. Cumulative metrics average the total noise over a specific time period.

The Single Event Noise Exposure Level (SENEL) is the most appropriate noise level-duration rating scale for a single noise occurrence. The SENEL, given in decibels, is the noise exposure level of a single event measured over the time interval between the initial and final times for which it exceeds the threshold noise level. A single event is a solitary occurrence of noise exposure, such as a train passing by or an aircraft overflight.

Cumulative noise metrics have been developed to assess community response to noise. They are useful because these scales attempt to include the loudness of each event, the duration of these events, the total number of events and the time of day these events occur, into one single number rating scale. They are designed to account for the known health effects of noise on people. Based on these effects, the observation has been made that the potential for a noise to impact people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. The predominate scales are: Equivalent Noise Level (LEQ) and the Community Noise Equivalent Level (CNEL). These scales are described in the following paragraphs.

LEQ is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. LEQ is the "energy" average noise level during the time period of the sample. LEQ can be measured for any time period, but is typically measured for one hour. It is the energy sum of all the events that occur during that time period.



CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

TYPICAL NOISE LEVELS OF
FAMILIAR SOURCES

NOISE ELEMENT

LOCKMAN &
ASSOCIATES

1

FIGURE

CNEL is a 24-hour, time-weighted annual average noise level. It is a measure of the overall noise experienced during an entire day. The time-weighted refers to the fact that noise which occurs during certain sensitive time periods is penalized for occurring at these times. In the CNEL scale, those events that take place during the evening (7 p.m. to 10 p.m.) are penalized by 5 dB and those at night (10 p.m. to 7 a.m.) are penalized by 10 dB. This penalty was selected to attempt to account for increased human sensitivity to noise during the quieter period of a day, where sleep is the most probable activity.

2.3 Sound Propagation

Noise sources may either be a "line source" (e.g., a heavily travelled highway) or a "point source" (e.g., a stationary engine or compressor). Highway traffic noise on high volume roadways simulates a "line source", and the drop-off rate of sound with distance approaches "cylindrical spreading", wherein a nominal 3.0 dBA drop occurs with each doubling of distance between the noise source and the noise receiver.

Environmental factors, such as wind direction and speed, temperature gradients, the characteristics of the ground (hard or soft) and the air (relative humidity), the presence of grass, shrubbery, and trees, often combine to increase the actual attenuation to 4.5 decibels per doubling of distance. Thus, a noise level of 74.5 decibels at 50 feet from a highway centerline would attenuate to 70.0 decibels at 100 feet, 65.5 decibels at 200 feet, and so forth. This is particularly true where the view of the roadway is interrupted by isolated buildings, clumps of bushes, scattered trees, or the intervening ground is soft or covered with vegetation, and the source or receiver is located more than 3 meters above the ground.

It should be noted, however, that the nominal value of 3.0 dBA with doubling applies to sound propagation from a "line source": (1) over the top of a barrier greater than 3 meters in height; or (2) when there is a clear unobstructed view of the highway, the ground is hard, there are no intervening structures, and the height of the line-of-sight averages more than 3 meters above the ground.

In an area which is relatively flat and free of barriers, the sound resulting from a single "point source" of noise spreads in a spherical manner away from the source and drops by 6 decibels for each doubling of distance, or 20 decibels for each factor of 10 in distance. This applies to fixed noise sources and mobile noise sources which are temporarily stationary, such as an idling truck or other heavy equipment operating within a confined area (such as industrial processes). Sound attenuation from a train resembles a line source near the railroad tracks and a point source at distances beyond three-tenths of the train length.

The noise levels adjacent to the line sources of noise, such as roadways, increase by 3.0 dBA with each doubling in the traffic volume (provided that the speed and truck mix do not change). From the mathematical expression relating increases in the number of noise sources (motor vehicles) to the increase in the adjacent noise level, it can be shown that a 26 percent increase in the traffic volume will cause a 1.0 dBA increase in adjacent noise levels. Doubling the number of vehicles on a given route increases the adjacent noise levels by 3.0 dBA, but changing the vehicle speed has an even more dramatic effect.

Increasing the vehicle speed from 35 to 45 mph raises the adjacent noise levels approximately 2.5 dBA. Reducing vehicle speeds from 35 to 30 mph decreases adjacent noise levels by 1.5 dBA on major roadways, and 1.6 dBA on secondary and collector roadways. A speed decrease from 40 mph to 35 mph reduces adjacent noise levels by 1.3 dBA on majors, and 1.4 dBA on

secondaries and collectors. Consequently, lowering motor vehicle speeds can have a significant positive impact in terms of reducing adjacent noise levels.

The truck mix on a given roadway also has a significant effect on the adjacent noise levels. As the number of trucks increases and becomes a large percentage of the total vehicle volume, the adjacent noise levels increase. This effect is more pronounced if the number of heavy duty (3+ axle) trucks is large when compared to the number of medium duty (2 axle) trucks.

Noise levels adjacent to roadways vary with the volume of traffic, the mean vehicular speed, the truck mix, and the road cross-section. Figure 2 provides a nomograph for each roadway type which allows the CNEL at either 50 or 100 feet to be determined from the daily two-way traffic volume and the speed of the vehicles. For example, a major arterial carrying 33,000 ADT with a posted speed limit of 40 mph would generate approximately 66.9 CNEL at 100 feet. Lowering the speed to 35 mph reduces the CNEL at 100 feet by 1.3 dBA, to 65.6 dBA. At a speed of 45 mph, the noise level at 100 feet would be 68.1 CNEL (1.2 dBA higher than at 40 mph).

Figure 2 provides design noise levels adjacent to typical major, secondary and collector roadways. The nomographs assume traffic volumes equivalent to the daily design capacity for each roadway type, as well as typical design speeds and a truck mix of 4.0 percent for major arterials and 2.58 percent for secondary and collector streets. These exhibits can be used as a general guide for planning purposes, to determine the potential "worst case" future noise levels and the setbacks needed to insure an acceptable noise environment for the planned land uses.

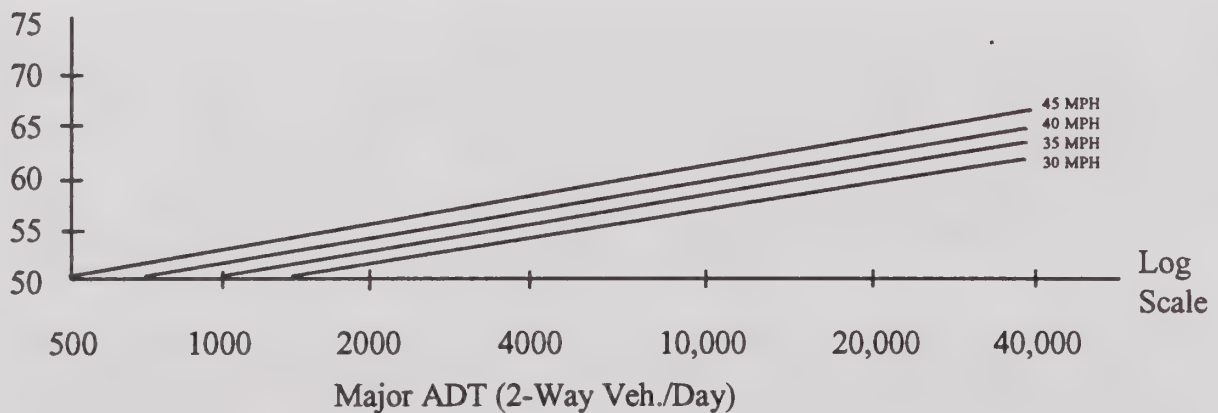
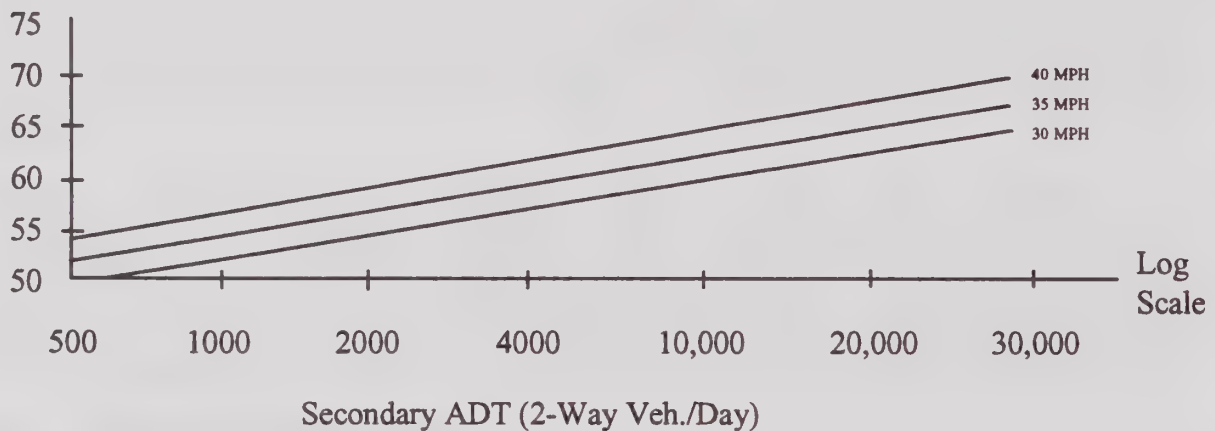
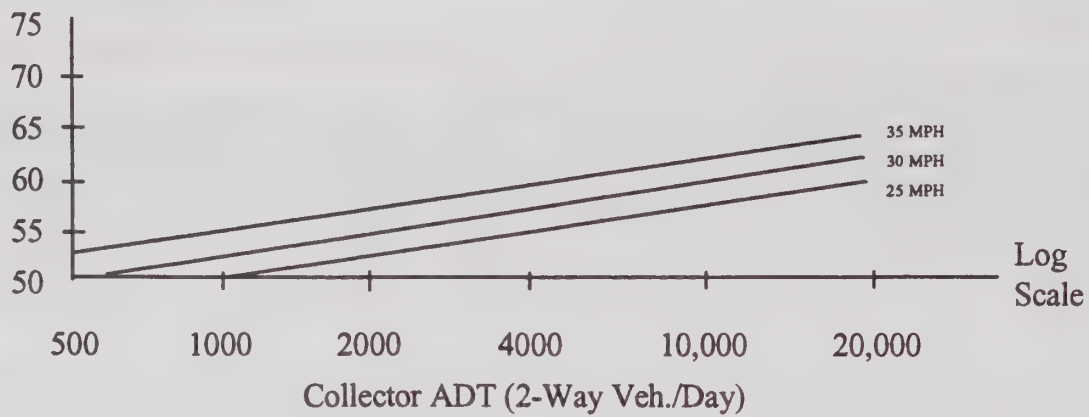
2.4 Human Reactions to Sound

Noise can cause temporary physical and psychological responses in humans. Temporary physical reactions to passing noises range from a startle reflex to constriction in peripheral blood vessels, the secretion of saliva and gastric juices, and changes in heart rate, breathing patterns, the chemical composition of the blood and urine, the dilation of the pupils of the eye, visual acuity, and equilibrium. The chronic recurrence of these physical reactions has been shown to aggravate headaches, fatigue, digestive disorders, heart disease, and circulatory and equilibrium disorders. Moreover, as a source of stress, noise is a causal factor in stress-related ailments such as ulcers, high blood pressure and anxiety.

Three harmful effects of noise are speech interference, the interruption of sleep, and hearing loss. Speech interference begins to occur at about 40 to 45 decibels and becomes severe at about 60 decibels. Background noise levels affect performance and the learning process through distraction, reduced accuracy, increased fatigue, annoyance and irritability, and the inability to concentrate (particularly when complex tasks are involved or in schools where younger children exhibit imprecise speech patterns and short concentration spans).

Several factors determine whether or not a particular noise event will interfere with or prevent sleep. These factors include the noise level and characteristics, the stage of sleep, the individual's age, and motivation to waken. Ill or elderly people are particularly susceptible to noise-induced sleep interference, which can occur when intruding noise levels exceed the typical 35-45 decibel background noise level in bedrooms. Sleep prevention can occur when intruding noise levels exceed 50 dBA.

Hearing loss, which may begin to occur at 75 dBA (see Table 1), is one of the most harmful effects of noise on people. Approximately 20 million people in the United States currently have some degree of hearing loss. In many of these cases, exposures to very loud, impulsive or sustained noise caused damage to the inner ear, which was substantial even before a hearing loss was actually noticed.



CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

TYPICAL NOISE LEVELS
VERSUS SPEED AND VOLUME
NOISE ELEMENT

LOCKMAN &
ASSOCIATES

2

FIGURE

TABLE 1
HARMFUL EFFECTS OF NOISE

Effect	Noise Levels at Which Harmful Effects Occur
Prevention or Interruption of Sleep	35 - 45 dBA
Speech Interference	50 - 60 dBA
Extra Auditory Physiological Effects	65 - 75 dBA
Hearing Loss	75 - 85 dBA

Source: California Department of Public Health, 1971

Approximately 10 percent of the population has such a low tolerance for noise that they object to any noise not of their own making. Consequently, even in the quietest environment, some complaints will occur. Another 25 percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. Despite this, the population as a whole can be expected to exhibit the following responses to changes in noise levels: an increase or decrease of 1.0 dBA cannot be perceived except in carefully controlled laboratory experiments; a 3.0 dBA increase is considered just noticeable outside of the laboratory; an increase of 5.0 dBA is often necessary before any noticeable change in community response (i.e., complaints) would be expected.

Table 2 details the effects of noise on individuals living in various noise environments, and predicts the average community reaction to various sound levels in a residential setting. As shown therein, hearing loss may begin to occur at 75+ Ldn and the noise environment will be highly annoying to 54 percent of the population. Residents who live in noise environments of 70 Ldn are not likely to experience hearing loss; however, 44 percent will be highly annoyed and noise will be viewed as one of the most important adverse impacts of the community environment. At 65 Ldn, hearing loss will not occur and 33 percent of the population will be highly annoyed by the noise environment.

Community responses to noise may range from registering a complaint by telephone or letter to initiating court action, depending upon each individual's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance. These include:

1. Socio-economic status and educational level of the residents;
2. Resident's belief that they are being treated fairly; and
3. Resident's belief that the noise source could be controlled.

Recent studies have shown that changes in long-term noise levels, measured in units of Ldn or CNEL, are noticeable and that people respond. About 20 percent of the people exposed to traffic noise of 60 Ldn will report being highly annoyed with the noise, and each increase of 1 Ldn is associated with approximately 2 percent more people being highly annoyed. When traffic noise exceeds 60 Ldn, people begin complaining. Group and legal actions to stop the noise should be expected to begin at traffic noise levels near 70 Ldn. (See Table 2).

TABLE 2
PERCENTAGE OF PERSONS HIGHLY ANNOYED WHO
REGISTER COMPLAINTS AS A FUNCTION OF Ldn

Noise Level Ldn (dBA)	Percentage of Persons Highly Annoyed	Percentage of Complaints Registered
50	13	Less Than 1
55	17	1
60	23	2
65	33	5
70	44	10
75	54	15
80	62	Over 20

Source: U.S. Environmental Protection Agency, "Public Health and Welfare Criteria for Noise", 7/27/73

3.0 STATEMENT OF GOALS

Goals reflect broad aims and basic values, identify the end objectives, and establish the basis and intent of implementing policy and program formulation.

The goals of the City of Hawaiian Gardens, in relation to noise, are:

1. Reduction of environmental noise levels, consistent with the criteria requisite for public health and quality of life;
2. Planned compatibility of transportation, commercial, and industrial noise sources with present and future noise-sensitive land uses;
3. Protection of presently quiet areas from future noise impacts; and
4. Allocation of noise impact mitigation costs to the agency or party responsible for the noise incompatibility.

4.0 STATEMENT OF POLICIES

The following set of policy statements has been developed taking into consideration the effectiveness in goal achievement, the social and political implications, and economic feasibility.

It is the policy of the City of Hawaiian Gardens to:

1. Identify the sensitivity of the various land uses to noise, and to establish acceptable noise standards and criteria consistent with health and quality of life goals;
2. Employ effective techniques of noise mitigation, based on quantified noise standards, through appropriate provisions in the building code, in the subdivision procedures, and in the zoning and noise ordinances;
3. Develop strategies for the orderly implementation of mitigation measures for present noise impacted areas, such as those bordering the San Gabriel River (605) Freeway, and the industrial uses adjacent to multiple and single family residential uses;
4. Analyze the economic impact of noise resulting from any proposed development project, and develop justification and plans for equitable resolution;
5. Develop land use compatibility criteria directed at prevention of encroachment of new noise sources on existing land uses;
6. Promote increased public awareness concerning the effects of noise;
7. Encourage the State Department of Transportation to conduct an active highway noise abatement program with scenic/aesthetic considerations;
8. Urge continued Federal and State research into noise problems and recommend additional research programs as problems are identified;
9. Maintain updated determinations and evaluations of the present and future noise levels associated with all significant transportation facilities in the City;
10. Pursue a policy of vigorous enforcement of existing laws relative to noise, and establish quantitative laws that will be more clearly understood and enforceable.

5.0 EXISTING NOISE ENVIRONMENT

As a prerequisite to an effective noise control program, a community must be cognizant of the location and extent of local noise problems; namely, major noise source locations, the number of sensitive receptors exposed, and what levels of exposure exist. This data can be utilized to focus noise control and abatement efforts. In some cases, the control of offending noise sources will be beyond the City's jurisdiction; however, by recognizing these limitations, more effective land use strategies can be developed.

5.1 Noise Sensitive Receptors

Land uses considered noise sensitive by the State of California include schools, hospitals, rest homes, and long-term care and mental care facilities. Some jurisdictions elect to also consider day care centers, single family dwellings, mobile home parks, churches, libraries, and recreation areas, sensitive to noise. Moderately sensitive land uses typically include: multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Relatively insensitive uses are business, commercial, and professional developments. Insensitive noise receptors include industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, motorcycle parks, rifle ranges, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

Current land uses within the City of Hawaiian Gardens that are sensitive to intrusive noise include schools, parks and hospitals. Figure 3 indicates the locations of sensitive receptors within the City limits.

5.2 Significant Noise Sources

Two types of noise sources should be considered: stationary and mobile noise sources. Fixed sources of noise in Hawaiian Gardens include air conditioning/refrigeration units, high level radio, stereo or television usage, power tools, lawnmowers, appliances used in the home, and barking dogs. Mobile noise sources are typically transportation-related and include airplanes, helicopters, automobiles, trucks, buses, and motorcycles. Although construction activities associated with public works projects or private development occur throughout the City, they are localized and temporary.

Motor vehicles in the City are a major source of continuous noise. The San Gabriel River (605) Freeway, along the western boundary of the city, carries appreciable volumes of both truck and commuter traffic. Other primary arterials, including Pioneer and Norwalk Boulevards, also experience high average daily traffic levels. The noise levels of land uses adjacent to these elements of the circulation system are some of the highest experienced in the City.

5.3 Existing Noise Levels

5.3.1 Noise Measurements

The existing noise environment was determined through the employment of a noise measurement survey of ambient noise sources and a computer noise model. The annual vehicle traffic and field data were incorporated into the computer model, through which an annual average of the noise levels at any location in the City was determined. The noise environment is commonly depicted in terms of lines of equal noise levels, or noise contours.

CITY OF HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

③ Noise Measurement Location
(Refer to Table for description)

Sensitive Receptors



Church

H Hospital

S School

☆ Senior Center

P Park

**SENSITIVE RECEPTORS
AND
NOISE MEASUREMENT
LOCATIONS**

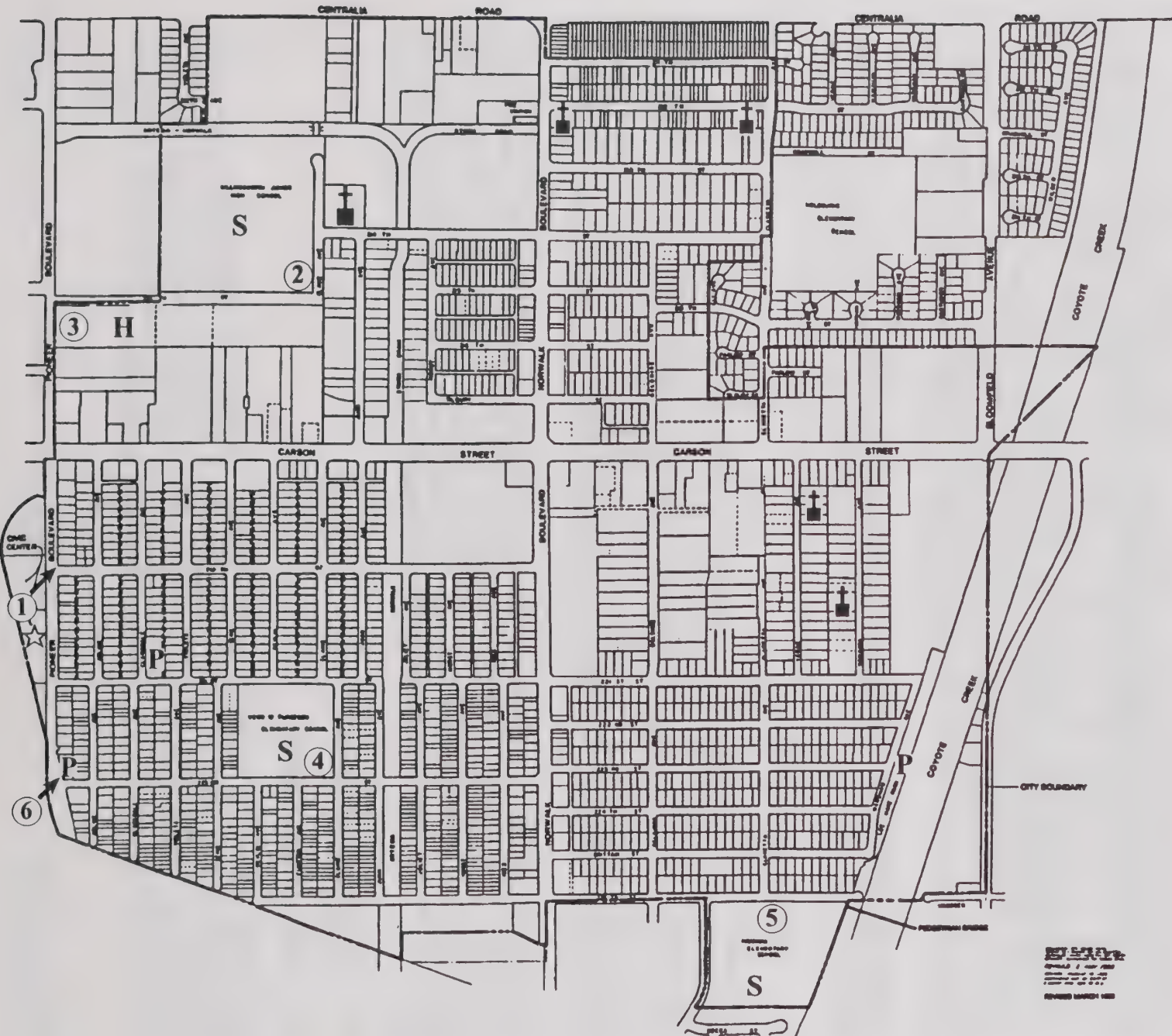
NOISE ELEMENT



**LOCKMAN &
ASSOCIATES**

3

FIGURE



Six locations were selected for the noise measurement survey. The locations were selected on the basis of their proximity to sensitive land uses, including educational, medical, and recreational facilities. The noise measurements were made with a Quest-215 Sound Level Meter. The system meets ANSI Type 1 standards and the calibrator has current certification traceable to the National Bureau of Standards.

The measurement site locations are illustrated in Figure 3, and described in Table 3.

TABLE 3
NOISE MEASUREMENT LOCATIONS AND RESULTS (dBA)

Location Number	Location Description	L ₁₀	L ₅₀	L ₉₀
1.	Southeast corner of Pioneer and 219th Street, 50' East of Pioneer	65	60	56
2.	Killingsworth Jr. High School Parking Lot	62	51	46
3.	Charter Community Hospital	70	60	52
4.	Ferguson Elementary School Parking Lot	60	54	50
5.	Hawaiian Elementary School Parking Lot	53	46	44
6.	Pioneer Park	64	60	58

The results of the measurement series (Table 3) are presented in terms of the noise levels percentile. The L₁₀ percentile, for example, represents the noise level exceeded 10 percent of the time, and; therefore, represents generally the loudest noise levels, whereas the L₉₀ represents the most quiet noise levels experienced, or the background noise levels. The results of the ambient noise measurement survey represent typical daytime noise levels. Nighttime noise levels due to traffic are anticipated to average 3 to 10 dBA less than the daytime levels. The ambient noise levels are primarily affected by noise associated with cars or trucks on the adjacent arterial, and to a lesser degree, by Los Angeles International Airport aircraft over flights.

As shown in Table 3, locations in proximity to the 605 Freeway experience noise levels that appear to be undesirable for outdoor activities. Interior noise levels at these locations may not be of concern due to building noise reduction characteristics.

5.3.2 Motor Vehicle Noise

The current noise levels adjacent to each of the master planned roadway links are illustrated in Figure 4, and have been analyzed to determine the location and extent of current noise problems. Table 4 provides the existing noise levels based upon current traffic volumes, lane geometrics, and posted speed limits. A 4 percent truck mix was assumed for all roadways.

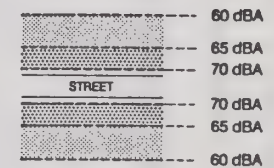
The noise levels at 100 feet from each roadway centerline listed in Table 4 were determined by modeling each facility utilizing the Highway Traffic Noise Prediction Model developed by the Federal Highway Administration (RD-77-108). This model is currently in use nationwide, and has been verified with extensive field measurements. It accepts various parameters including the traffic volume, vehicle mix and speed, and roadway geometry for use in computing equivalent noise levels during typical daytime, evening, and nighttime hours. The resultant noise levels are then weighted, summed over 24 hours, and output as the CNEL value. CNEL contours are subsequently located through a series of computerized iterations designed to identify the 60, 65, and 70 CNEL contour locations.

As shown in Table 4, the roadways where current traffic volumes generate noise levels above acceptable levels for sensitive receptors at 100 feet from the centerline include portions of Carson Street, Norwalk Boulevard, Pioneer Boulevard, and Centralia Road. High noise levels are typically the result of large traffic volumes, high vehicle speeds, and high truck mixes.

CITY OF HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

EXISTING NOISE CONTOURS



LOCKMAN &
ASSOCIATES

4

FIGURE

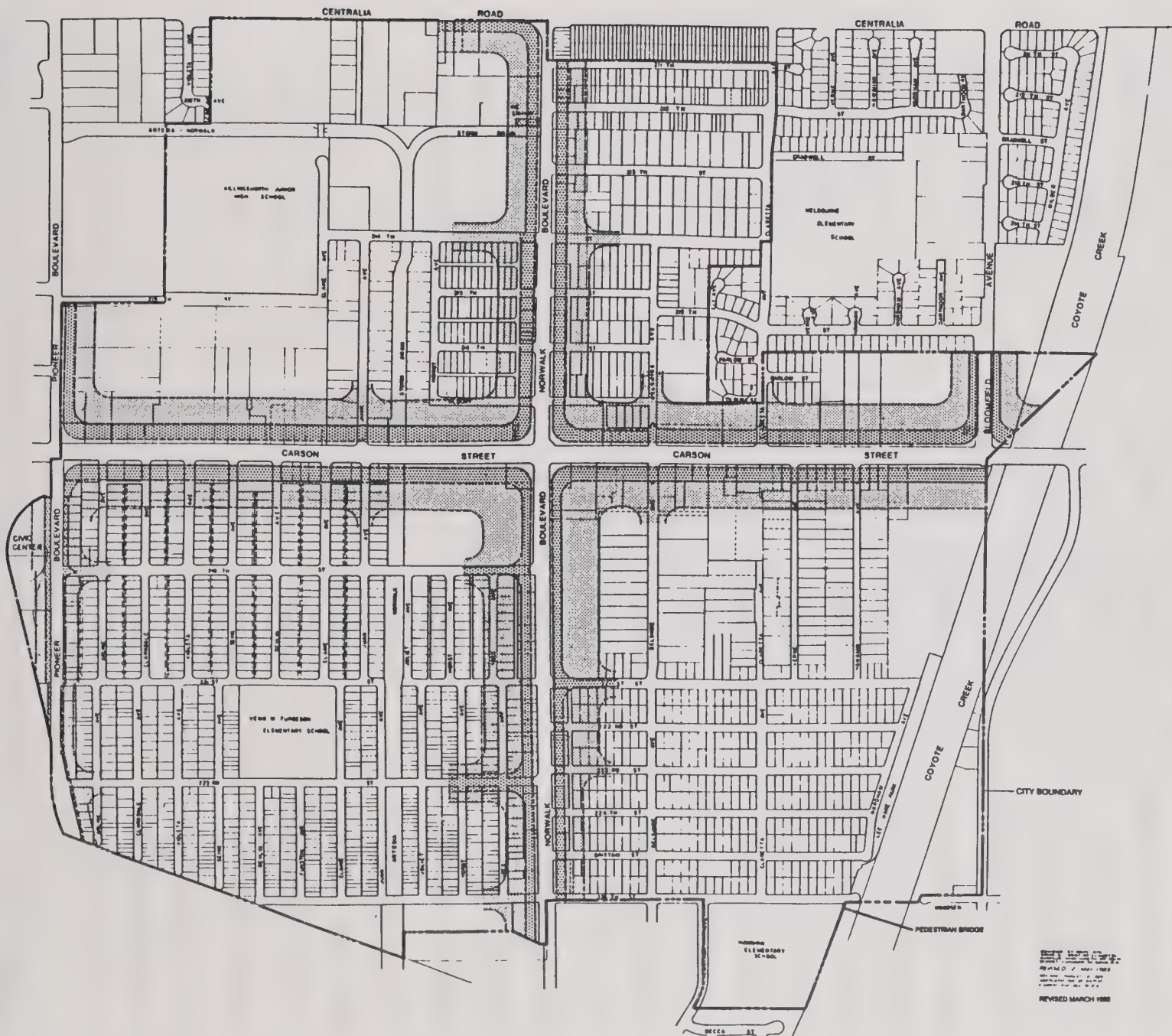


TABLE 4
EXISTING EXTERIOR NOISE LEVELS

Roadway	ADT ⁽¹⁾ (Veh/day)	CNEL 100 feet	Distance to Contours (ft)		
			70 dBA	65 dBA	60 dBA
Bloomfield n/o Carson	11,794	64.4	38	93	196
Carson w/o Elaine	27,579	68	78	167	330
Carson e/o Juan	27,231	68	75	165	326
Carson w/o Norwalk	29,277	68	81	173	335
Carson e/o Norwalk	25,109	67.6	73	157	315
Carson e/o Claretta	25,363	67.7	73	158	317
Norwalk s/o Centralia	15,837	65.7	52	115	229
Norwalk n/o Carson	19,137	66.5	61	132	270
Norwalk s/o Carson	17,072	66	55	121	345
Norwalk s/o 223rd	16,169	65.7	52	115	229
Pioneer n/o Carson	16,517	65.9	53	117	231
Pioneer s/o Carson	12,627	64.7	41	92	204
Pioneer n/o 219th	7,218	62.3	15	70	150
Pioneer s/o 219th	5,672	61.2	3	58	127
Pioneer n/o 223rd	4,558	60.2	--	46	104
Belshire n/o Carson	1,807	56.3	--	4	58
Belshire s/o Carson	2,472	57.6	--	6	73
Centralia w/o Norwalk	14,828	65.4	50	109	232
Claretta n/o Carson	1,870	56.4	--	3	60
Juan n/o Carson	1,674	55.9	--	--	55
Juan s/o Carson	1,198	54.6	--	--	40

TABLE 4
EXISTING EXTERIOR NOISE LEVELS
(Continued)

Roadway	ADT ⁽¹⁾ (Veh/day)	CNEL 100 feet	Distance to Contours (ft)		
			70 dBA	65 dBA	60 dBA
Violeta s/o Carson	531	51.5	--	--	3
214th e/o Norwalk	1,216	54.6	--	--	40
214th w/o Norwalk	3,065	58.5	--	10	83
215th e/o Pioneer	2,458	57.6	--	6	73
219th e/o Pioneer	1,937	56.5	--	4	61
219th e/o Juan	3,405	59	--	34	59
219th w/o Norwalk	2,637	57.9	--	21	77
221st w/o Elaine	1,471	55.3	--	--	48
221 st e/o Norwalk	2,752	58.1	--	25	80
223rd e/o Pioneer	2,010	56.8	--	--	64
223rd w/o Norwalk	4,858	60.5	--	50	112
223rd e/o Norwalk	1,124	54.4	--	--	37
226th w/o Norwalk	1,811	56.3	--	4	59

(1) Average Daily Traffic Counts, 1990.

6.0 FUTURE NOISE ENVIRONMENT

Roadways have a tendency to attract traffic until they reach their capacity, then drivers divert to other less congested routes. In view of this phenomenon, it is important to consider the noise impact zone adjacent to each master planned highway when traffic volumes reach the capacity. This approach provides a "worst case" perspective on adjacent noise exposure.

6.1 Significant Noise Sources

Growth in and near the City of Hawaiian Gardens will generate increased traffic volumes. As traffic levels rise, existing residences will be exposed to higher noise levels. A 22 percent increase in daily traffic by 2012 will generate a 1.0 dBA noise increase. Doubling the traffic volume will increase adjacent noise levels by 3.0 dBA. Additionally, new circulation links may be constructed that serve the anticipated growth. These links will, in some cases, reduce the traffic volumes on other overcrowded roadways. However, in other cases, new roadway segments will provide capacity needed by future development and, in so doing, will become new sources of environmental noise.

6.2 Future Noise Levels

Future traffic volumes for the master planned roadway links are provided in the General Plan Circulation Element. Based upon the roadway classifications, vehicular speeds and ultimate volumes, the future noise levels adjacent to roadway links within the City of Hawaiian Gardens were determined. Vehicular speeds for the links analyzed were based upon the current posted speed limits. Table 5 shows the master planned future noise levels associated with motor vehicle sources. It can be seen that the largest traffic volumes at the highest speeds result in the noisiest roadways. Figure 5 illustrates the future noise contours.

6.3 Site Design Review

HUD noise policy (24 CFR 51B) requires interior environments of 45 L_{dn} as a goal. In areas where L_{dn} is 60, 70 or 75, the reduction levels should be 15, 25 or 30 dBA, respectively. The best way to reduce interior noise levels is through the use of block wall barriers and/or earthen berms. Dense concrete block can result in up to a 40 dBA reduction in noise levels from sender to receiver.

The layout of structures can also influence noise levels. Structures should have footprints that deflect noise, rather than trap it. Typically, noise levels are reduced by 20 dBA through normal construction techniques. Additional reductions can be achieved by the following construction methods:

1. Install air conditioning and close windows;
2. Reduce the size and number of windows facing the noise source (50 percent of wall to 20 percent of wall - 3 dB);
3. Increase the thickness of the glass windows (3/16" increased 1/2" = 10 dB);
4. Install double glazed windows (35 dB); and
5. Develop staggered stud walls (common stud wall 35 dB, staggered stud wall 39 dB), or staggered stud walls with an absorbent blanket (43 dB).

TABLE 5
FUTURE EXTERIOR NOISE LEVELS

Roadway	ADT (Veh/day)	CNEL 100 feet	Distance to Contours (ft)		
			70 dBA	65 dBA	60 dBA
Bloomfield n/o Carson	14,428	65.2	47	104	222
Carson w/o Elaine	33,339	68.9	88	186	360
Carson e/o Juan	32,897	68.8	87	186	360
Carson w/o Norwalk	35,369	69.1	90	191	370
Carson e/o Norwalk	30,334	68.5	83	177	337
Carson e/o Claretta	30,641	68.5	83	177	337
Norwalk s/o Centralia	19,132	66.5	61	133	270
Norwalk n/o Carson	23,119	67.3	64	150	300
Norwalk s/o Carson	20,264	66.7	63	137	281
Norwalk s/o 223rd	19,533	66.6	62	135	277
Pioneer n/o Carson	19,954	66.7	63	137	281
Pioneer s/o Carson	15,254	65.5	50	111	233
Pioneer n/o 219th	8,720	63	13	79	166
Pioneer s/o 219th	6,852	62	11	67	143
Pioneer n/o 223rd	5,506	61.1	--	56	124
Belshire n/o Carson	2,090	57.1	--	13	69
Belshire s/o Carson	2,860	58.5	--	27	66
Centralia w/o Norwalk	17,190	66.2	58	126	263
Claretta n/o Carson	2,170	57.2	--	13	68
Juan n/o Carson	1,940	56.8	--	--	64
Juan s/o Carson	1,390	55.3	--	--	48

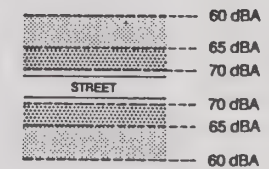
TABLE 5
FUTURE EXTERIOR NOISE LEVELS
(Continued)

Roadway	ADT (Veh/day)	CNEL 100 feet	Distance to Contours (ft)		
			70 dBA	65 dBA	60 dBA
Violeta s/o Carson	623	51.8	--	--	10
214th e/o Norwalk	1,413	55.3	--	--	49
214th w/o Norwalk	3,557	59.5	--	39	94
215th e/o Pioneer	2,870	58.5	--	27	66
219th e/o Pioneer	2,230	57.5	--	33	72
219th e/o Juan	3,962	59.9	--	43	98
219th w/o Norwalk	3,064	58.8	--	31	87
221st w/o Elaine	1,706	56.3	--	3	58
221 st e/o Norwalk	3,192	59	--	33	89
223rd e/o Pioneer	2,334	57.6	--	18	73
223rd w/o Norwalk	5,634	61.4	6	61	131
223rd e/o Norwalk	1,309	55.2	--	--	47
226th w/o Norwalk	2,100	57.2	--	13	68

CITY OF HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

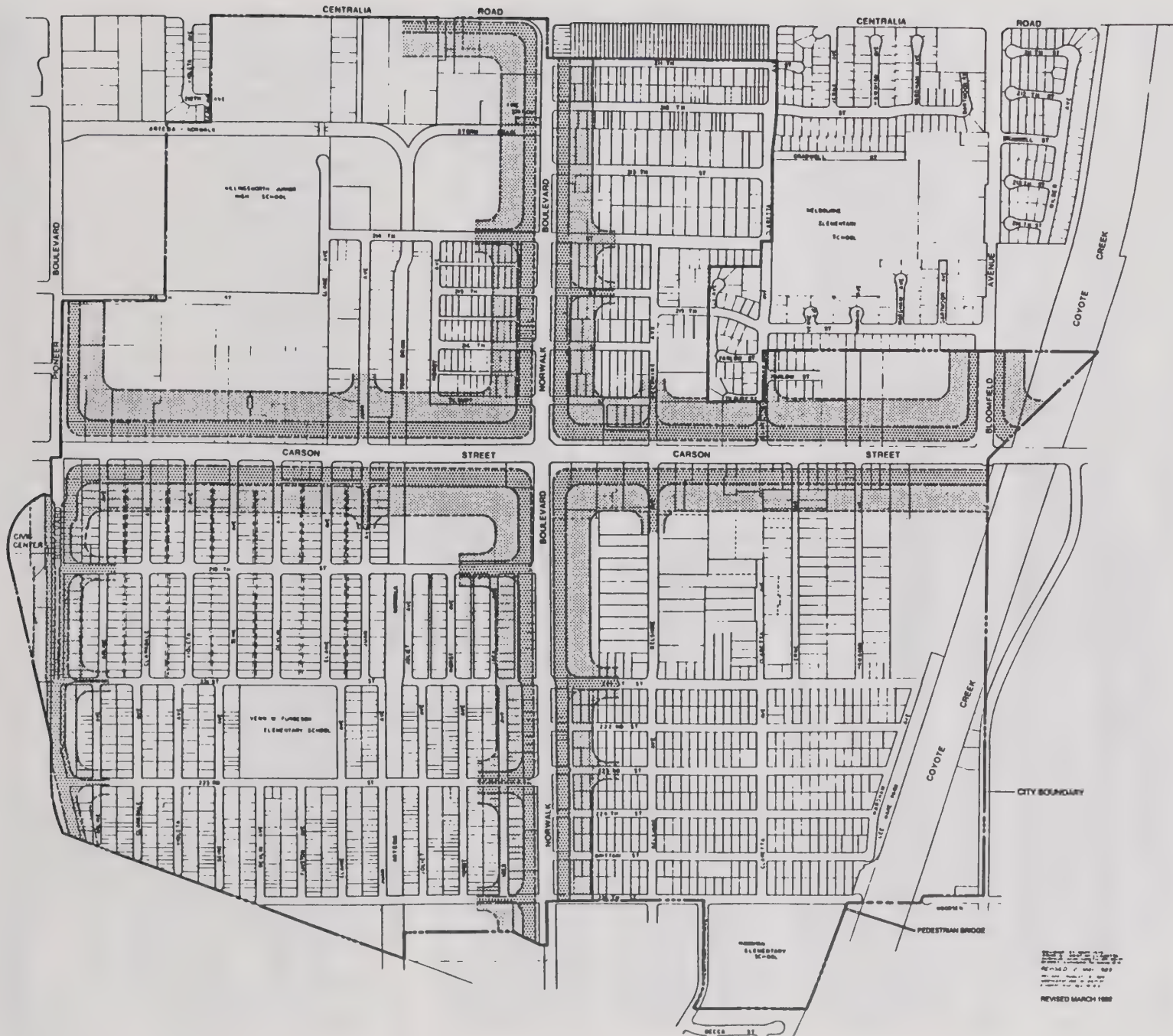
FUTURE NOISE CONTOURS



LOCKMAN &
ASSOCIATES

5

FIGURE



7.0 LAND USE COMPATIBILITY

Some land uses are less tolerant of noise than others. For example, schools, hospitals, churches and residences are more sensitive in noise intrusion than commercial or industrial activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design of new land use patterns.

The intent of such planning is to:

1. Maintain those areas deemed acceptable for noise exposure; and
2. Use land use controls (i.e., zoning, Conditional Use Permits) in areas of excessive noise exposure to limit or restrict uses to those which are compatible.

7.1 Noise Compatibility Criteria

The City of Hawaiian Gardens, in developing its Noise Element, must make determinations regarding how much noise is excessive. A community's sensitivity to noise may be taken into account by starting with the general guidelines in Figure 6 and then applying the adjustment factors shown in Table 6 which allow acceptability standards to be set which both reflect the desires of the community and its assessment of the relative importance of noise pollution, and are below the known levels of health impairment.

Denotation of a land use as "clearly acceptable" on Figure 6 implies that the highest noise level in that band is the maximum desirable for existing or conventional construction which does not incorporate any special acoustic treatment. In evaluating land uses as acceptable or unacceptable, consideration must be given to the types of noise source, sensitivity of the receptor, likely noise reduction measures, and the potential for the noise source to interfere with speech, sleep, or other activities associated with that particular land use.

Noise complaints can be substantially mitigated by using the guidelines suggested in Section 6.3. The acceptability criteria has been developed consistent with Federal and State guidelines and standards for residential noise exposure that recommend an interior noise exposure of 45 dBA CNEL to permit normal residential activity. By incorporating typical noise reduction characteristics of residential dwellings (12 to 18 dBA), the 60 dBA outdoor value for residential land use would provide the recommended interior environment.

7.2 Noise Attenuation with Distance

In its "Noise Assessment Guidelines", the U.S. Department of Housing and Urban Development uses a 4.5 decibel drop for each doubling of distance in assessing roadway noise. Thus, a noise level of 74.5 decibels at 50 feet from the highway centerline would be attenuated naturally to 70.0 decibels at 100 feet, 65.5 decibels at 200 feet, 61.0 decibels at 400 feet and so forth. This 4.5 decibel reduction with doubling of distance was applied throughout the analyses in this report.

Land Use Category	55	60	65	70	75	80	Interpretation:
Residential - Low Density Single Family, Duplex, Mobile Homes							Normally Acceptable Specified land use is satisfactory, based upon the assumption that any building involved are of normal conventional construction, without any special noise insulation requirements.
Residential - Multi-Family							
Transient Lodging - Motels, Hotels							Conditionally Acceptable New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							Normally Unacceptable New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							Clearly Unacceptable New construction or development should generally not be undertaken.
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

CITY OF
HAWAIIAN GARDENS

LAND USE COMPATIBILITY FOR
COMMUNITY NOISE
ENVIRONMENTS
NOISE ELEMENT

GENERAL PLAN UPDATE - 1992

LOCKMAN &
ASSOCIATES

6

FIGURE

TABLE 6
COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)
ADJUSTMENT FACTORS

Type of Correction	Description	Amount of Correction to be Added to Measured CNEL in dB
Seasonal Correction	Summer (or year-round operation).	0
	Winter only (or windows always closed).	-5
Correction for Outdoor Residual Noise Level	Quiet suburban or rural community (remote from large cities and from industrial activity and trucking).	+10
	Quiet suburban or rural community (not located near industrial activity).	+ 5
	Urban residential community (not immediately adjacent to heavily traveled roads and industrial areas).	0
	Noisy urban residential community (near relatively busy roads or industrial areas).	- 5
	Very noisy urban residential community.	-10
Correction for Previous Exposure and Community Attitudes	No prior experience with the intruding noise.	+ 5
	Community has had some previous exposure to intruding but little effort is being made to control the noise. This correction may also be applied in a situation where the community has not been exposed to the noise previously, but the people are aware that bona fide efforts are being made to control the noise.	0
	Community has had considerable previous exposure to the intruding noise and the noise maker's relations with the community are good.	- 5
	Community aware that operation causing noise is very necessary and it will not continue indefinitely. This correction can be applied for an operation of limited duration and under emergency circumstances.	10
Pure Tone or Impulse	No pure tone or impulsive character.	0
	Pure Tone or impulsive character present.	+ 5

Source: General Plan Guidelines, 1990.

8.0 NOISE MITIGATION MEASURES

8.1 General Methods to Reduce Noise Impacts

There are several basic techniques available to minimize the adverse effects of noise on sensitive noise receivers. Classic engineering principles suggest controlling the noise source wherever feasible and protecting the noise receptors when noise source control mechanisms have been preempted by State and Federal governments.

Noise producers within local jurisdiction include:

1. Industrial processes;
2. Electrical substations;
3. Wastewater treatment facilities;
4. Transportation system locations;
5. Swimming pool/spa pump motors;
6. Air conditioning units;
7. Drive-thru speakers;
8. Siren usage; and
9. Local government controlled or sanctioned activities, such as City vehicles, public works projects.

Regulatory mechanisms available to control these noise sources include:

1. The City Noise Ordinance;
2. The application of "conditions of approval" on new developments;
3. Land use policy and approval practices as outlined in this General Plan; and
4. The provision of noise information in permit applications for swimming pools, spas, and air conditioning systems.

In the event that source control mechanisms have been employed and yet noise impacts persist or are projected to occur, additional techniques should be considered. Acoustic site planning, architectural design, acoustic construction techniques and the construction of noise barriers are all effective methods for reducing noise impacts.

Acoustic site planning involves the careful arrangement of land uses, lots and buildings to minimize intrusive noise levels. The placement of noise compatible land uses between the roadway and more sensitive uses is an effective planning technique. The use of buildings as noise barriers, and their orientation away from the source of noise, can shield sensitive activities, entrances and common open space areas. Clustered and planned unit developments can maximize the amount of open space available for landscaped buffers next to heavily

travelled roadways and thereby allow aesthetic residential lot setbacks in place of continuous noise barriers.

Acoustic architectural design involves the incorporation of noise reduction strategies in the design and layout of individual structures. Building heights, room arrangements, window size and placement, balcony and courtyard design, and the provision of air conditioning all play an important role in shielding noise sensitive activities from intrusive sound levels.

Acoustic construction is the treatment of various parts of a building to reduce interior noise levels. Acoustic design for walls, doors, ceilings and floors, as well as the use of dense building materials, acoustic windows (double glazed, double paned, thick, non-openable, or small with air-tight seals) and the inclusion of maximum air spaces in attics and walls are all available options.

Noise barriers are relatively easy to design and are inexpensive. Consequently, they are often used in place of the techniques discussed above. Ideally, noise barriers incorporate the placement of berms, walls or a combination of the two, in conjunction with appropriate landscaping, to effect an aesthetically pleasing environment. Where space is available, a meandering earth berm is both effective and pleasing. Where space is restricted, a wall is effective. In either case, however, thick landscaping (without deciduous plants) should be specified to reduce the visual impact of the barrier and retain an attractive ambiance.

8.2 Land Use Policies and Recommendations

The major thrust of this Noise Element is to establish objectives and policies which will result in compatible land use planning. Table 7 is a land use compatibility chart derived from policies and objectives identified in the Noise Element. Upon adoption of the General Plan Update, land use planning issues will incorporate the standards contained within Table 7.

This Noise Element can also be used as a vehicle to specify zoning requirements which reflect uses of the land which are noise compatible and to restrict less compatible uses. In this manner, unacceptable noise exposures can be prevented.

The City will encourage proper site planning to minimize noise impacts and encourage creative solutions when potential conflicts between ambient noise levels and land use arise. Detailed noise impact analyses will be required in conjunction with the submittal of plans for new development within the City in noise impacted areas. Their analyses will be required to address future, as well as existing, noise levels.

Several techniques are available to prevent an increase in noise levels in areas where noise sensitive uses are currently located. The City will continue with its policy of retaining existing speed limits and diverting heavy truck traffic onto designated truck routes, as traffic volumes increase with future growth.

The measures discussed below are designed to mitigate potential existing and future noise problems within the City of Hawaiian Gardens.

1. Minimize noise emissions from all local government controlled or sanctioned activities via the creation and adoption of a section of the Noise Ordinance which:

TABLE 7
LAND USE COMPATIBILITY WITH NOISE
CITY OF HAWAIIAN GARDENS

Land Use	Exterior CNEL	Interior CNEL
Residential		
- Single Family or Rural Areas	60 dBA	45 dBA
- Multi-Family ¹	54 dBA	45 dBA
Schools and Pre-Schools		
- Classrooms	65 dBA	45 dBA
- Playgrounds	70 dBA	-
Libraries	-	50 dBA
Hospitals & Convalescent Facilities		
- Living Areas	-	55 dBA
- Sleeping Areas	-	45 dBA
Recreational		
- Quiet, Passive Areas	65 dBA	-
- Noisy, Active Areas	70 dBA	-
Commercial & Industrial	75 dBA	-

Note:

1. As required by the California Noise Insulation Standards.

-
- (a) Sets maximum allowable noise specifications for new City owned or operated vehicles;
 - (b) Provides noise reduction retrofit equipment where effective and economically feasible; and
 - (c) Sets noise emission and construction time limits on public work projects.
 2. Insure that public buildings (schools, libraries, etc.) are sufficiently noise insulated to permit their intended function to be uninterrupted by exterior noise events.
 3. Limit siren usage within populated areas by police, fire and ambulance vehicles.
 4. Exercise discretion when requiring noise barriers to ensure that: (a) other methods of noise attenuation have been explored, (b) landscaped berm and barrier combinations are proposed where feasible, and (c) the proposed barrier is not only dense enough to be effective (a minimum mass of 4.5 lbs./sq. foot) but also properly designed and aesthetically compatible with the surrounding community.
 5. Assist in the formation of special assessment districts or other funding opportunities to install noise barriers or berm and barrier combinations in areas where existing residences back up to major thoroughfares.
 6. Ensure that the design and improvement of future master planned roadway links in the City is accomplished in a manner which minimizes noise impacts on adjacent educational facilities and adjoining neighborhoods.
 7. Ensure, through the General Plan process, that objectives and policies provide for compatible noise environments for all existing and future land uses within the City.
 8. Ensure that the General Plan objectives and policies be adhered to in all cases where the noise environment has the potential to affect land use planning.
 9. Consider the following uses noise sensitive and discourage them in areas where exterior noise levels exceed 65 CNEL unless measures are implemented which reduce the noise exposure below this level:
 - (a) single and multiple family residential uses;
 - (b) group homes;
 - (c) hospitals;
 - (d) schools and other learning institutions; and
 - (e) parks and open space areas where quiet is a basis for use.
 10. Incorporate measures into future residential projects which attenuate exterior noise levels in outdoor activity areas to a maximum of 65 CNEL.

11. Ensure through the design review process that schools are located and designed so that exterior noise exposures do not exceed 65 CNEL and interior peak noise levels do not exceed 60 dBA as a result of exterior noise sources.
12. Ensure through the design review process that any branch library facilities are designed and located so that interior noise levels do not exceed 60 CNEL and average interior noise levels during business hours do not exceed 50 dBA.
13. Ensure through the design review process that interior noise levels for hospital and convalescent homes do not exceed 55 CNEL in interior living areas and 45 CNEL in interior sleeping areas.
14. Ensure through the design review process that recreational areas intended for quiet or passive activities are designed and located so that noise levels do not exceed 70 CNEL.
15. Ensure through the design review process that recreational areas intended for noisy or active uses are buffered from passive use areas and from surrounding, noise sensitive land uses.
16. Ensure through the design review process that business and professional offices, where effective communication is essential, mitigate interior noise to 55 CNEL.
17. Ensure through the design review process that exterior noise levels at commercial and industrial areas do not exceed 75 dBA.
18. Ensure through the design review process that noise tolerant land uses are located in areas irrevocably committed to noise producing land uses, such as transportation corridors or railroads.
19. Future projects approved within the City shall reflect adopted policies regarding the reduction of unnecessary noise near sensitive receptors such as parks, hospitals, libraries, schools and convalescent homes.
20. The City shall periodically review County and regional plans for land use, transportation, airport operation, etc., to identify any potential noise impacts and develop strategies for the control of major noise sources on a County-wide and regional basis.
21. Noise sensitive land uses, including residences, hospitals and long-term medical care facilities, educational facilities, libraries, churches and places of public assembly shall not be allowed near major stationary noise sources.
22. The application of noise insulation and other noise control techniques in new schools, hospitals, and convalescent homes shall be consistent with State and Federal regulations.
23. Consideration shall be given to the effects of truck mix, speed limits, and ultimate motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned.

8.3 Enforcement Programs

To adequately carry out the programs identified above, and to comply with State requirements for certain other noise control programs, the following enforcement programs will be implemented by the City:

1. Enforce State vehicle noise regulations (Section 23130, 23130.5, 27150, 27151 and 38275 of the California Vehicle Code) to curtail the use of vehicles equipped with illegal or faulty exhaust systems and "hot rods" exhibiting tire squeal or excessive exhaust noise.
2. Specify that, in Conditionally Acceptable Areas (Figure 7), applicants must submit an acoustical analysis of proposed residential developments, prepared under the supervision of a person experienced in the field of acoustical engineering, which evaluates existing and projected noise levels as well as the application of noise attenuation measures.
3. Enforce the California Noise Insulation Standards (Title 24 California Code of Regulations) for multi-family dwellings to ensure an acceptable maximum interior noise level of 45 CNEL in habitable rooms, and maintain adequate noise insulation.
4. Acoustical privacy, consistent with the California Noise Insulation Standards and all existing and future requirements outlined in the State Housing Code, shall be strictly enforced for both single and multiple family residential construction.

CITY OF HAWAIIAN GARDENS GENERAL PLAN UPDATE



**SAFETY
ELEMENT**

SAFETY ELEMENT

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	S-1
1.1 Statutory Requirements	S-1
1.2 Purpose and Intent	S-1
1.3 General Location and Historic Background	S-2
1.4 Geology	S-3
1.4.1 Soils	S-3
1.4.2 Faults and Fault Zones	S-7
1.4.2.1 Active Faults	S-7
1.4.2.2 Potentially Active Faults	S-14
1.5 Seismicity	S-16
1.5.1 Seismic Parameters of Bedrock Motion	S-16
1.5.2 Modes of Earthquake Damage	S-16
2.0 EXISTING CONDITIONS	S-23
3.0 ISSUES AND PROBLEMS	S-24
3.1 Residential and Industrial Hazards	S-24
3.1.1 Fire and Seismic Hazards	S-24
3.1.2 Fire and Earthquake Insurance	S-24
3.1.3 Multi-Story Buildings and Dependent Populations	S-25
3.1.4 Industrial Fire Hazards	S-25
3.2 Public Buildings and Facilities	S-25
3.2.1 Hospital and Medical Facilities	S-25
3.2.2 Indoor Public Assembly Facilities	S-26
3.2.3 Infrastructure	S-26
3.2.4 Slope Stability/Flooding	S-26
3.2.5 Schools	S-27
3.3 Disaster Response Problems	S-27
3.4 Summary of Hazards	S-28
3.5 Emergency Preparedness Plan	S-29
3.5.1 Planning for Post-Disaster Recovery	S-31
3.5.2 Management of Future Development	S-31
4.0 OPPORTUNITIES	S-32
5.0 GOALS AND POLICIES	S-33
6.0 STANDARDS AND CRITERIA	S-35
6.1 Standards	S-35
6.2 Criteria	S-35
6.2.1 Criteria for Evaluating Risk	S-35
6.2.2 Hypothetical Risk Analysis	S-37

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
7.0 IMPLEMENTATION PROGRAM	S-41
7.1 Identification of Existing Programs	S-41
7.2 Seismic Zoning	S-42
7.2.1 Possible Liquefaction Potential	S-42
7.2.2 Probable Ground Shaking Only	S-42

TABLE OF CONTENTS
(Continued)

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Physiographic Map	S-4
2. Generalized Geologic Map	S-5
3. Surficial Geologic Materials	S-6
4. Major Features	S-8
5. Faults And Seismicity	S-9
6. Newport-Inglewood Earthquake	S-11
7. San Andreas 8.3 Earthquake	S-13
8. Liquefaction Susceptibility	S-22

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Active Faults	S-18
2. Potentially Active Faults	S-20
3. Environmental Risk Analysis	S-30
4. Risks Of Fatal Injury - Representative Risks In Daily Life	S-36
5. Hazard Comparison Of Non-Earthquake Resistive Buildings	S-38
6. A Scale of Risks	S-39

1.0 INTRODUCTION

The California State Legislature, through requirements of the safety element, has placed specific responsibilities on local governments for identification and evaluation of natural hazards, and the formation of programs and regulations to reduce risk. The safety element of the Hawaiian Gardens General Plan is designed to meet these responsibilities, and by focusing on fire, flooding, geologic and seismic hazards, will serve as the primary vehicle for relating safety planning to land use decisions.

1.1 Statutory Requirements

State law requires that the city's adopted General Plan contain a safety element. The required contents of the element are contained in Government Code Section 65302(g) as indicated below:

The general plan shall include a safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence and other geologic hazards known to the legislative body; flooding; and wild land and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards.

Prior to the periodic review of its General Plan and prior to preparing or revising its safety element, the City will consult the Division of Mines and Geology of the Department of Conservation, and the Office of Emergency Services, for the purpose of including information known by and available to the department and the office required by the statute.

At least 45 days prior to adoption or amendment of the safety element, the City will submit to the Division of Mines and Geology of the Department of Conservation one copy of a draft of the safety element and any technical studies used for developing the safety element. The City will consider the Division's findings prior to final adoption of the Safety Element, and will provide the Division with a copy of the adopted Safety Element.

1.2 Purpose and Intent

The safety element aims at reducing death, injuries, property damage, and the economic and social dislocation resulting from natural hazards. While it focuses on fire, flooding, geologic, and seismic hazards, it may also address other locally relevant safety issues such as vehicle accidents, hazardous materials spills, crime, power failures, and storm drainage.

The safety element is the primary vehicle for relating local safety planning to the City's land use decisions. The City will establish land use planning policies, standards, and designations based on the criteria set forth in the safety element. Additionally, local decisions related to zoning, subdivisions, and entitlement permits, for example, will be tied to the safety element's identification of hazards and hazard abatement provisions. The element is a suitable forum for hazard reduction design criteria. It is also the appropriate locale for local government policies supporting hazard mitigation measures - such as land use regulations and project conditions of approval.

The safety element must examine the issues related to protecting the community from any unreasonable risks associated with:

1. Seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure;
2. Slope instability leading to mudslides and landslides;
3. Subsidence and other known geologic hazards;
4. Flooding; and
5. Wildland and urban fires.

It must also address the following as they relate to known fire and geologic hazards:

1. Evacuation routes;
2. Peakload water supply requirements;
3. Minimum road widths; and
4. Clearances around structures.

Specific items included in the study are generally limited to the boundaries of the City, except for elements of seismicity which have a much broader effect on the scope of the study, including:

1. A discussion of the general stratigraphy (rock type and age), and the structural geology (earth structure, faults and folds);
2. The classification and location of active and potentially active faults throughout Southern California which may affect the City;
3. An assessment of the major seismic parameters for ground surface and bedrock motion;
4. An evaluation of the potential for ground failure or other seismically induced damage to the ground surface; and
5. A review of historic earthquakes (historic seismicity) for Southern California as they affect Hawaiian Gardens.

1.3 General Location and Historic Background

The City of Hawaiian Gardens is located in the southeastern part of Los Angeles County, California, and is an urbanized community situated on the Los Angeles Coastal Plain. The City of Hawaiian Gardens is bounded by the cities of Long Beach, Lakewood, and Cypress. The Coyote Creek forms the eastern boundary of the City.

Abundant evidence of seismic activity in California is found in the 200 years of records since Gaspar de Portola reported a strong earthquake near the Santa Ana River in Orange County in 1769. Of the thousands of earthquakes felt in California that have occurred during the last

200 years, three (Fort Tejon 1857, Owens Valley 1872, San Francisco 1906) were truly great earthquakes (over 7.75 Richter Magnitude); 13 were major earthquakes (Magnitude 7.0 to 7.7), such as the Loma Prieta-San Francisco 1989, Arvin-Tehachapi, 1952, and El Centro, 1940; and over 60 were moderate shocks (Magnitude 6.0 to 6.9), such as Santa Barbara 1925, Long Beach 1933, San Fernando 1971, and Whittier Narrows 1988. About 200 earthquakes of Magnitude 4.0 to 5.9 occur within the State every 10 years. These quakes are felt locally and have done substantial to little structural damage.

The existence of historic earthquake records are of a relatively short life span when compared to geologic time so that methods for the prediction of seismicity must be based not only on statistical data from historic records, but more importantly, on the extensive geologic evidence of faulting during the past millions of years. These data suggest that California should anticipate a great earthquake approximately every 60 to 100 years, a major quake every 20 years, and a moderate quake about every eight to 10 years. However, no regular periodicity has been established by the data and prediction of earthquakes is not yet possible.

The State of California has an area of approximately 156,000 square miles. The Landers/Big Bear 1992 Magnitude 7.5/6.6 quake was felt over 60,000 square miles, Loma Prieta-San Francisco 1989, Magnitude 7.1 quake was felt over 54,000 square miles, the Arvin-Tehachapi 1952, Magnitude 7.7 quake was felt over 160,000 square miles, and the San Francisco 1906, Magnitude 8.3 quake was felt over 375,000 square miles. From this, it can be concluded that no part of the State of California is immune from earthquake damage. Nevertheless, parts of California will experience a lower earthquake risk because of all or a combination of the following: 1) low population; 2) solid bedrock at the ground surface; and 3) long distance from known active faults.

1.4 Geology

Topographically, the City of Hawaiian Gardens is on the south-sloping Los Angeles Coastal Plain and is along the western bank of the San Gabriel River (Figure 1). Yerkes, et al., (1965) has described the Los Angeles Coastal Plain as follows:

The present-day Los Angeles physiographic basin of coastal Southern California is an alluviated lowland, sometimes called the coastal plain (Mendenhall, 1905, p. 11) which is bounded on the north by the Santa Monica Mountains and the Elysian, Repetto, and Puente Hills, and on the east and southeast by the Santa Ana Mountains and San Joaquin Hills. The lowland surface slopes gently south or seaward but it is interrupted by the Coyote Hills near the northeast margin by a line of elongated low hills and mesas to the south and west that extends from Newport Bay northwest to Beverly Hills, and by the Palos Verdes Peninsula at the southwest extremity.

The physiographic basin is underlain by a structural depression, parts of which have been the sites of discontinuous deposition since Late Cretaceous time and of continuous subsidence and marine deposition since Middle Miocene time (Figure 2).

1.4.1 Soils

The City of Hawaiian Gardens is covered by a blanket of medium-grained and fine-grained sediments (Figure 3). The soil varies in thickness from 0 to 50 meters, and consists of sand, silt and clay silts which are poorly compacted.

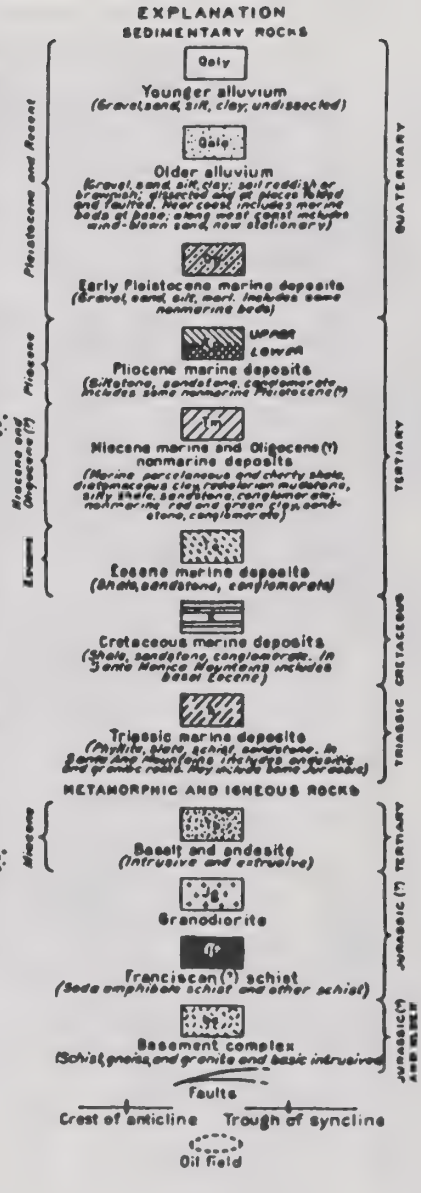
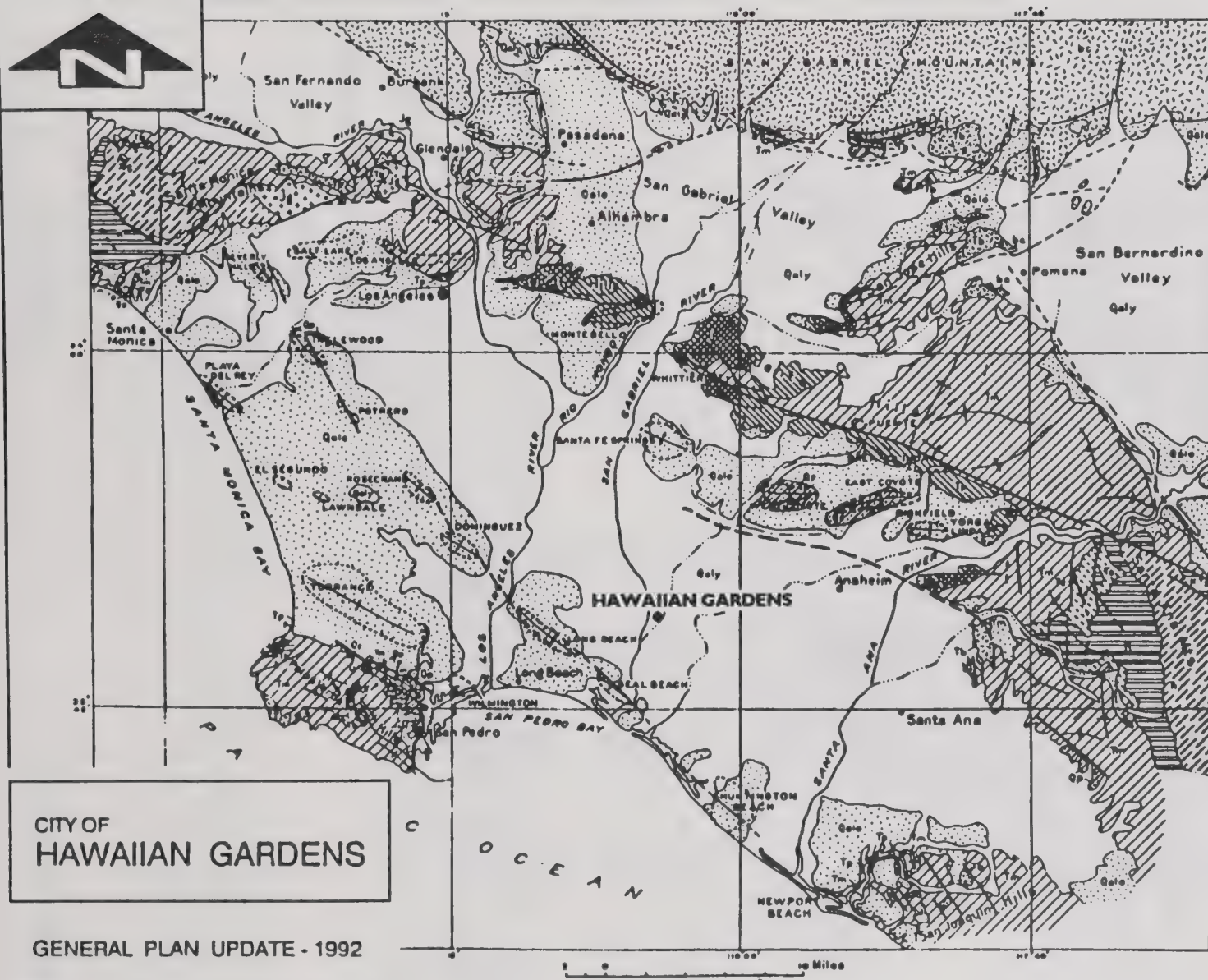
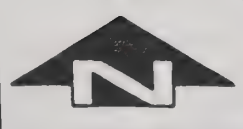


CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

PHYSIOGRAPHIC MAP
SAFETY ELEMENT

LOCKMAN &
ASSOCIATES



CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

GENERALIZED GEOLOGIC
MAP
SAFETY ELEMENT

LOCKMAN &
ASSOCIATES

2

SOURCE: U.S.G.S. PROFESSIONAL PAPER 1360



EXPLANATION

Qvc	Qc	Qm	Qf	QUATERNARY
Very coarse grained sediment (cobbles and boulders)	Coarse-grained sediment (gravel)	Medium-grained sediment (sand)	Fine-grained sediment (silt and clay)	
Qvc	Qc	Qm	Qf	QUATERNARY
Very coarse grained sediment (cobbles and boulders)	Coarse-grained sediment (gravel)	Medium-grained sediment (sand)	Fine-grained sediment (silt and clay)	

T₁	T₂	TERTIARY
Chiefly undifferentiated Tertiary and pre-Tertiary sedimentary rocks and interbedded intrusive and extrusive rocks		
Plu		PRE-TERTIARY
Chiefly intrusive and metamorphic rock, undifferentiated		

Contact

CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

**SURFICIAL GEOLOGIC
MATERIALS**

SAFETY ELEMENT

SOURCE: U.S.G.S. PROFESSIONAL PAPER 1360

LOCKMAN &
ASSOCIATES

3

FIGURE

Medium-Grained Holocene Alluvium (Qym)

Most of the City of Hawaiian Gardens consists of this soil type. It is characterized as moderately well-drained, moderately sorted to well-sorted sand and silty sand forming alluvial plans and natural levees along streams. Locally it contains thin beds of well-sorted clay, silt, gravel and occasional cobbles and boulders. It contains freshwater pelecypod and gastropod shells. It is intermediate in character and laterally extends between fine- and coarse-grained alluvium with which it interfingers. Generally, it overlies late Pleistocene alluvium and is less than 50 meters thick in this area.

Fine-Grained Holocene Alluvium

The central and central-southern portions of the City of Hawaiian Gardens are of this type of soil. It is characterized as poorly sorted, plastic, locally carbonaceous sandy silt, silt, silty clay, and clay in poorly drained flood areas, on distal parts of alluvial fans, and in localized depressions. It contains occasional lenses and small channels of well-sorted sand and fine gravel. It contains fossils of living vertebrate species and may contain freshwater pelecypod and gastropod shells. It interfingers with and grades both laterally and upstream into medium-grained alluvium and overlies late Pleistocene alluvium and bedrock. It is 0 to 15 meters thick in coastal basins.

Basement Complex

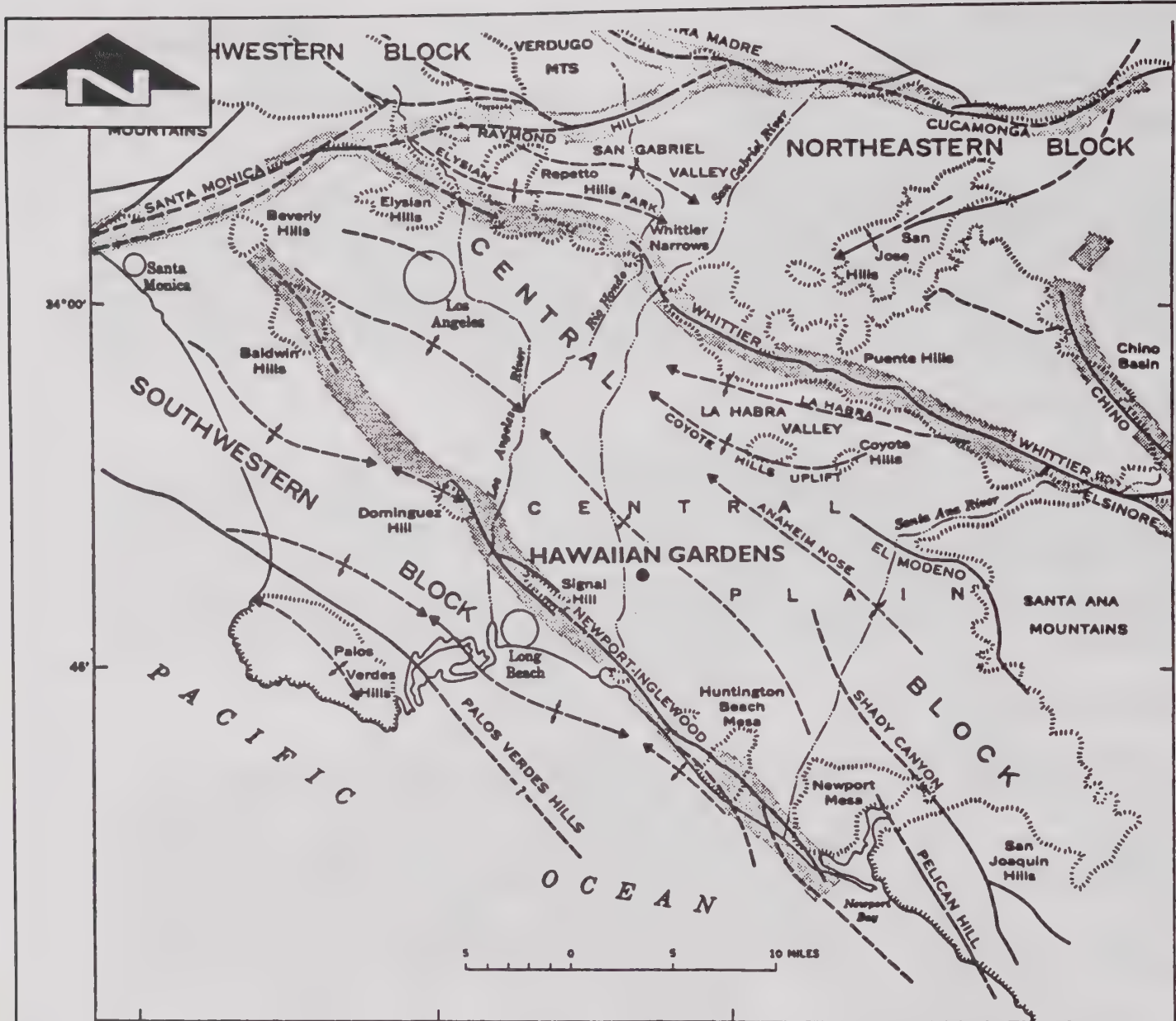
The Basement Complex underlying the City of Hawaiian Gardens is probably similar to those exposed in the Santa Ana Mountains: the Bedford Canyon Formation, the Santiago Peak Volcanics, and intrusive plutonic rocks of the Southern California batholith. The Bedford Canyon Formation has been described by Yerkes (1965) as a slightly metamorphosed, dark, well-bedded sandstone and siltstone, containing minor limestone and pebble conglomerate. Yerkes (1965) describes the Santiago Peak Volcanics as chiefly andesitic breccias, flows, agglomerates, and tuffs, which commonly contain debris of the Bedford Canyon Formation. The Southern California batholith consists of quartz diorite, granodiorite, and quartz monzonite (Yerkes, 1965).

1.4.2 Faults and Fault Zones





The City of Hawaiian Gardens is located between the Norwalk Fault, four miles to the northeast, and the Newport-Inglewood Fault, five miles to the southwest. The City is situated in an area of active crustal compression (Robinson, 1974), and will experience shaking due to a seismic event. The City of Hawaiian Gardens is not listed in the Special Studies Zone, as of January 1, 1990; and there are no mapped surface or subsurface faults within the city boundaries. Therefore, seismic shaking from movement along one of the faults listed below will be the major consideration for the City. Figures 4 and 5 illustrate the major fault zones and their relationship to the City of Hawaiian Gardens.

1.4.2.1 Active Faults

Numerous definitions for active faults have been proposed. Probably the most encompassing definition is that of the California Council on Intergovernmental Relations in the General Plan Guidelines, September 1973, which is: "(Active Fault): A fault that has moved in recent geologic time and which is likely to move again in the relatively near future. (For geologic purposes, there are no precise limits to recency of movement or probably future movement



EXPLANATION

-  **WHITTIER**
Fault or fault zone
Dashed where approximately located; queried where doubtful
-  **Anticline**
Dashed where approximately located
-  **Syncline**
Dashed where approximately located
-  **Boundary of structural block**

**CITY OF
HAWAIIAN GARDENS**

GENERAL PLAN UPDATE - 1992

MAJOR FEATURES
SAFETY ELEMENT

SOURCE: U.S.G.S. PROFESSIONAL PAPER 1360

**LOCKMAN &
ASSOCIATES**



EXPLANATION



Late Quaternary fault—Dotted where concealed onshore; dashed where offshore (inferred from acoustic-reflection profiles); queried where existence uncertain; star where fault trace too short to show at scale. Bar and ball on relatively downthrown side. Sawtooth on upper plate of thrust fault. Representative dip of fault shown where known. Letter indicates geologic time period within which latest surface faulting is known to have occurred: H, Holocene; L, late Quaternary; queried where age uncertain. Date indicates most recent historical surface faulting; queried where historical occurrence is uncertain

Epicenters of earthquakes ($M \geq 2.0$) occurring in 1978-84, showing corresponding magnitude range

SCALE 1:250 000



CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

FAULTS AND SEISMICITY

SAFETY ELEMENT

SOURCE: ZIONY AND JONES, 1989

LOCKMAN &
ASSOCIATES

5

FIGURE

that define an 'active fault.' Definitions for planning purposes extend on the order of 10,000 years or more back and 100 years or more forward. The exact time limits for planning purposes are usually defined in relation to contemplated uses and structures.)" This definition is used in this report for classifying the faults described in alphabetical order, as follows:

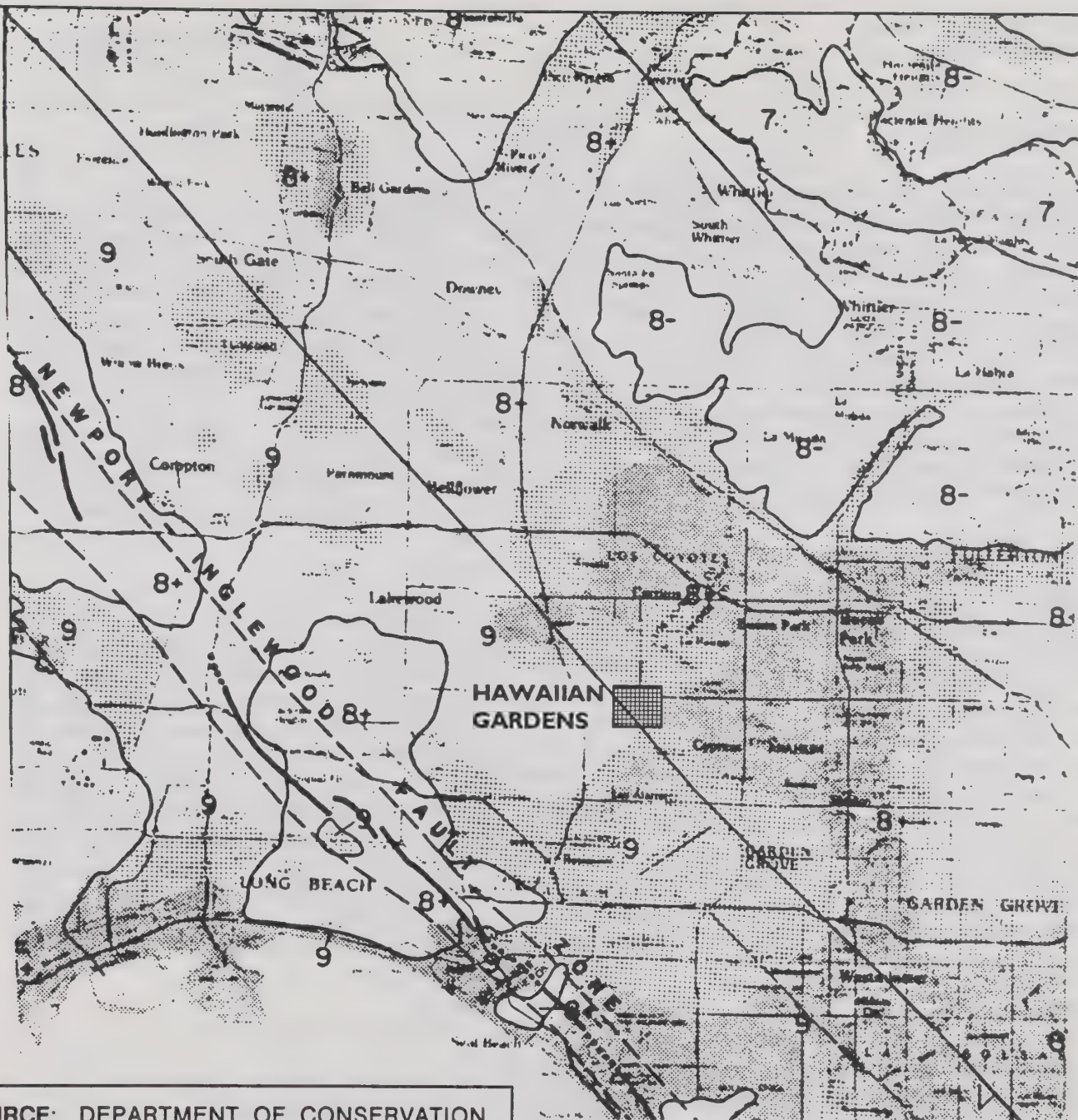
Newport-Inglewood Fault Zone

The Newport-Inglewood Fault Zone is approximately five miles southwest of the City of Hawaiian Gardens. This Fault Zone is a series of left stepping, *en echelon*, northwest trending discontinuous faults indicating a through-going right-lateral strike-slip fault at depth. Harding (1973) indicates that the Newport-Inglewood Fault Zone is a nearly-vertical, right-lateral strike-slip fault at depth extending from the southern edge of the Santa Monica Mountains southeastward to the offshore area near Newport Beach. Numerous recent shocks greater than Magnitude 4.0 and also the historic Magnitude 6.3 Long Beach Earthquake on March 11, 1933, centered offshore near Newport Beach suggest an active seismic history. Although there has been no observed ground surface displacement associated with the Newport-Inglewood Fault Zone, there may have been subsurface fault displacement of approximately seven inches associated with the October 21, 1941, earthquake (Magnitude 4.9) and with the June 18, 1944, earthquake (Magnitude 4.5). This Fault Zone could generate a $7.0 \pm$ Magnitude earthquake within the next 50-100 years.

A major earthquake on this fault within the highly urbanized Los Angeles metropolitan area poses one of the greatest hazards to lives and property in the nation. An earthquake planning scenario has been developed to prepare for the possibility of a major earthquake on the Newport-Inglewood Fault Zone. Figure 6 illustrates the impact on Hawaiian Gardens. The scenario maps and damage assessments are intended for emergency planning purposes only. They are based upon the following hypothetical chain of events: (1) a particular earthquake occurs; (2) various localities in the planning area experience a specific type of shaking or ground failure; and (3) certain critical facilities undergo damage and others do not. The conclusions regarding the performance of facilities are hypothetical and are not to be construed as site-specific engineering evaluations. For the most part, damage assessments are strongly influenced by the seismic intensity distribution map developed for this particular scenario earthquake. There is disagreement among investigators as to the most realistic model for predicting seismic intensity distribution. None have been fully tested and each would yield a different earthquake planning scenario. Facilities that are particularly sensitive to emergency response will require a detailed geotechnical study. The damage assessments are based upon the scenario listed. An earthquake of significantly different magnitude on this or any one of many other faults in the region will result in a markedly different pattern of damage.

Norwalk Fault

The Norwalk Fault is approximately four miles northeast of the City of Hawaiian Gardens. This fault strikes 65 to 85 degrees to the northwest and dips steeply to the northeast. The fault is noted as the possible source of a damaging earthquake (Magnitude 4.7) occurring on July 8, 1929 (Ziony and Yerkes, 1985) which caused significant damage in Whittier and Norwalk. The fault is approximately 16 miles long, and has an arcuate trace between Buena Park and Tustin. Microseismic activity along the Norwalk Fault is high and Richter (1958) suggests that the fault may be capable of generating a Magnitude 6.3 earthquake.



SOURCE: DEPARTMENT OF CONSERVATION,
DIVISION OF MINES AND GEOLOGY,
SPECIAL PUBLICATION 99.



EARTHQUAKE PLANNING SCENARIO

For a Major Earthquake on the
Newport-Inglewood Fault Zone in Southern California

SEISMIC INTENSITY DISTRIBUTION

EXPLANATION

SHAKING INTENSITY (Modified Mercalli; Arabic numerals used for simplicity).

No significant damage to structures.

Damage negligible in buildings of good design and construction, slight to moderate in well-built ordinary buildings, considerable in poorly built or badly designed buildings. Fall of plaster in considerable to large amount, also some stucco. Broke numerous windows, furniture to some extent. Broke weak chimneys at roof-line (sometimes damaging roofs). Fall of cornices from towers and buildings.

Damage slight in structures (brick) built especially to withstand earthquakes. Considerable in ordinary substantial buildings, partial collapse, racked, tumbled down wooden houses in some cases, threw of panel walls in frame structures. Fall of walls, twisting, fall of chimneys, columns, monuments, also factory stacks, towers. "8+" indicates values near the top of this range, "7" values near the bottom.

Damage considerable in structures (masonry) built especially to withstand earthquakes; threw out of plumb some wood-frame houses built especially to withstand earthquakes; great in substantial (masonry) buildings, some collapse in large part; or wholly shifted frame building off foundations, racked frames, underground pipes sometimes broken.

Intensities >9 are generally attributable to surface faulting and ground failure. Accordingly, intensities >9 can be anticipated along the fault zone and wherever ground failure occurs.

NEWPORT-INGLEWOOD FAULT ZONE



Known active fault traces, dotted where concealed (dashed lines indicate zone of deformation).



Area subject to seismically induced landslide

CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

NEWPORT - INGLEWOOD
EARTHQUAKE

SAFETY ELEMENT

LOCKMAN &
ASSOCIATES

6

FIGURE

Raymond Fault

Hawaiian Gardens is approximately 16 miles south of the Raymond Fault. The northeast-southwest trending Raymond-Fault Zone has a length of approximately 16 miles, width of 0.25 miles, and consists of one to three strands which diverge from the foothills of the San Gabriel Mountains in Sierra Madre to the Adams Hill area of Glendale. The sense of movement on the fault is reverse left-oblique. The fault serves as a ground water barrier and is coincident with an obvious topographic scarp along much of its extent between Monrovia Canyon and Arroyo Seco. Geologic evidence suggests there has been a minimum of 222 feet of vertical displacement along a portion of the fault near Raymond Hill since Miocene Time, and that clay gouge along the fault within the alluvium serves as an aquiclude. Age dating of soil material which fills cracks probably caused by the latest movement of this fault suggest that the fault moved approximately 3,000 years ago. The maximum credible earthquake expected from the Raymond Fault is Magnitude 6.8, if the entire 16-mile length of the fault were to break.

San Andreas Fault Zone

The City of Hawaiian Gardens is approximately 43 miles south of the San Andreas Fault Zone. This fault zone extends from the Gulf of California northward to the Cape Mendocino area where it continues northward along the ocean floor. The fault plain is essentially vertical and has a right lateral strike-slip sense of movement. The total length of the San Andreas Fault Zone is approximately 750 miles. The activity of the fault has been recorded during historic events, including the 1906 (magnitude 8) event in San Francisco and the 1857 (magnitude 7.9) event between Cholame and San Bernardino, where at least 250 miles of surface rupture occurred. This seismic event is the most significant historic earthquake in Southern California history. Study has shown that the character of seismicity of the San Andreas varies along the strike of the fault. The length of this right lateral fault and its active seismic history indicates that it has a very high potential for large-scale movement in the near future (Magnitude 8.0_{\pm}), and should be considered important in land-use planning for most cities in California. The seismic intensity distribution for an 8.3 earthquake on the San Andreas Fault is illustrated in Figure 7.

San Fernando Fault Zone

The San Fernando Fault Zone is approximately 33 miles north of the City of Hawaiian Gardens. Fault segments that were demonstrably involved in the February 9, 1971 San Fernando Earthquake (Magnitude 6.4) are, for the most part, east-west trending thrust faults with associated left lateral movement. The ground surface ruptures occurred on little known pre-existing faults in an area of low seismicity and previously unknown historic ground displacement. The zone of displacement was approximately nine miles long and had a maximum of three feet vertical movement. The fault plane dips northward at an angle of approximately 55 degrees from the horizontal near the surface, and shallows to 35 degrees at depth. The earthquake epicenter of the February 9, 1971 seismic event was near the community of Newhall. The recurrence interval for the San Fernando Fault Zone is estimated to be approximately 200 years.



SOURCE: DEPARTMENT OF CONSERVATION,
DIVISION OF MINES AND GEOLOGY,
SPECIAL PUBLICATION 99.

EARTHQUAKE PLANNING SCENARIO

For a Magnitude 8.3 Earthquake on the San Andreas Fault in
Southern California

SEISMIC INTENSITY DISTRIBUTION

Compiled by
James F. Davis, John H. Bennett, Glenn Borchardt,
Judy W. Cole, James E. Kohle, Salem J. Rice and Michael A. Silve
1992
EXPLANATION



- 8** Rossi-Forel Intensity (Intensity data modified by C.D.M.G. from U.S. Geological Survey Open File Report 81-115, 1981).
- Rossi-Forel Intensity Scale**
- <7 - No significant damage
 - 7 - Strong Shock. Overthrow of moveable objects, fall of plaster, ringing of church bells, general panic, without damage to buildings.
 - 8 - Very Strong Shock. Fall of chimneys, cracks in the walls of buildings.
 - 9 - Extremely Strong Shock. Partial or total destruction of some buildings.

- GROUND FAILURE**
- Surface Fault Rupture for Scenario Earthquake.
 - Areas of high ground water (<10m) with potential for ground failure, including liquefaction and settlement.
 - High Potential
 - Moderate or Unknown Potential

CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

**SAN ANDREAS 8.3
EARTHQUAKE**
SAFETY ELEMENT

**LOCKMAN &
ASSOCIATES**

7

FIGURE

Whittier-Elsinore Fault Zone

The Whittier-Elsinore Fault Zone is approximately ten miles northeast of the City of Hawaiian Gardens. This northwest-trending fault tends from Whittier Narrows southeast across the Santa Ana River, past Lake Elsinore, into western Imperial County and then into Mexico. Fault segments northwest of the Santa Ana River that were demonstrably involved in the October 1 and 4, 1987 Whittier Narrows Earthquake (Magnitude 5.9 and 5.3) are, for the most part, northeast-dipping reverse faults along which bedrock of the late Miocene Puente Formation, making up most of the Puente Hills, have been uplifted. The principal strands of the northwestern Whittier fault dip 80-85 degrees to the north at a depth of at least 10,000 feet. The principal strands in the northernmost Whittier area dip 80 degrees to the north at a depth of about 8,000 feet (Yerkes, 1972). "Right-handed" *en echelon* folds along the Whittier fault within rocks of the Puente Formation indicate long-term right lateral offset. This fault zone has the expected maximum capability of a magnitude 6.6 earthquake.

1.4.2.2 Potentially Active Faults

Many faults in California have not been mapped in enough detail to classify them as active. These faults may have moved during the Pleistocene or even during the Holocene Age. Sufficient concrete evidence is not presently available to classify them as active. Potentially active faults may move again in the near future, and therefore must be considered in land use planning. The Association of Engineering Geologists has defined a potentially active fault as:

....those, based on available data, along which no known historical ground surface ruptures or earthquakes have occurred. These faults, however, show strong indications of geologically recent activity.

The above definition is used in this element for the following faults, arranged in alphabetical order:

Malibu Coast Fault

The Malibu Coast Fault is approximately 26 miles northwest of the City of Hawaiian Gardens. The onshore Malibu Coast Fault consists of several subparallel strands trending east-west along the southern margin of the western Santa Monica Mountains. The onshore fault zone is comprised of reverse faults with dips averaging between 45 and 80 degrees to the north, with zones of deformation as wide as 0.5 kilometers (Ziony and Yerkes, 1985). The latest movement on this fault was believed to have been more than 11,000 years ago, but Converse Consultants, working with Dr. Roy Schleman, have found evidence of Holocene displacement within colluvial soils determined to be 5,000 to 6,000 years old at his location. Based on this evidence, the fault is considered to be active. The Malibu Coast Fault is approximately 48 miles long and is believed capable of generating a 7.0 Magnitude earthquake.

San Gabriel Fault

The San Gabriel Fault is approximately 25 miles north of the City of Hawaiian Gardens. This fault extends from Frazier Park to Mount Baldy Village, a distance of approximately 84 miles. The San Gabriel fault is reported by Ziony and Yerkes (1985) to consist of a zone of echelon strands striking 45 to 65 degrees west of north with dips between 50 and 80 degrees toward the north. The fault displays a complex sense of movement that appears to change from one section of the fault to another. Stratigraphic evidence (sequence of sediment deposition)

suggests approximately 35 miles of right lateral offset since Miocene (Ehlig, 1973) time. Because of its length and its ancestral relationship with the San Andreas Fault System, its potential future activity must be realized. Due to the length of its surface trace, the San Gabriel Fault is believed capable of generating a 7.8 Magnitude earthquake.

Santa Monica Fault

The City of Hawaiian Gardens is located approximately 18 miles southeast of the Santa Monica Fault. No detailed information is available on the exact location of this southwest-northeast trending fault at the ground surface (fault trace), or on its geometric orientation. From the inferred trace on geologic maps and some oil well data, the fault has been described as a northwest-dipping thrust fault bordering the south flank of the Santa Monica Mountains. This fault, the Malibu Coast Fault, and the Raymond Fault belong to one large fault system (Lamar 1965). The San Fernando and Sierra Madre Fault Zones are also north-dipping mountain frontal thrust faults; therefore, comparisons of the Santa Monica, Raymond, Malibu Coast, Sierra Madre, and San Fernando Faults can be suggested. Experience from the 1971 San Fernando Earthquake indicates that the Santa Monica Fault could generate a moderate seismic event (Magnitude 6.6). This fault, consequently, is classified as potentially active.

Sierra Madre Fault Zone

The City of Hawaiian Gardens is located approximately 20 miles south of the Sierra Madre Fault Zone. This fault zone is a series of *en echelon* moderate angle, north-dipping, reverse faults (thrust faults). The zone of faulting is very similar to, and may be within, the same fault system as the San Fernando Fault Zone which moved in 1971. Movement along these frontal faults has resulted in the uplift of the San Gabriel Mountains. Seismic activity is expected to be a maximum of 7.2 magnitude. Geologic evidence indicates that the fault segments in numerous places have juxtaposed basement bedrock over alluvium and dip northerly below the steep topographic front of the San Gabriel Mountains. Barriers to groundwater flow have been cited as evidence of alluvial-buried faults of the Sierra Madre fault system.

Verdugo Fault

The Verdugo Fault is approximately 17 miles north of the City of Hawaiian Gardens. This fault bounds the south flank of the Verdugo Mountains, and appears to merge with the Eagle Rock-San Rafael Fault System in the vicinity of Verdugo Wash. The northwest-trending, north-dipping Verdugo Fault has thrust Cretaceous basement rocks southward several hundreds of feet over terrace and alluvial deposits of Pleistocene and possible Holocene Age (less than 10,000 years). The fault is a low-angle reverse fault (thrust fault).

Low magnitude earthquakes (less than 3.0) which have been attributed to activity along the Verdugo Fault are occasionally recorded in the Burbank-Glendale area. No direct evidence of ground displacement has been observed associated with these low-magnitude seismic events (earthquakes). The Verdugo Fault has a high potential for future activity and is capable of generating a Magnitude 6.4 earthquake. It is not considered to have had seismic activity during historic time.

The faults discussed under the classifications active and potentially active are considered the most significant in relation to the seismicity of the County of Los Angeles. The classification of the above faults is coincident with the classification by the California Division of Mines and Geology (Jennings, 1973).

1.5 Seismicity

Historically, California has always been seismically active. Few areas in Southern California have not been or will not be affected in the future by strong ground shaking from nearby earthquakes. Recorded epicenters of earthquakes that have occurred within and surrounding Los Angeles County are shown in Figure 5. These epicenters represent seismic activity above Magnitude 2 between 1978 and 1984 and indicates that the Los Angeles region is very earthquake prone.

1.5.1 Seismic Parameters of Bedrock Motion

Seismic parameters have been estimated for active (Table 1) and for potentially active faults (Table 2), which may have a significant effect on the City of Hawaiian Gardens within the next 100 years. The most characteristic earthquake parameters which have been estimated are: 1) average bedrock acceleration; 2) predominate period of motion, 3) duration of shaking; and 4) Richter magnitude (maximum credible earthquake).

These parameters are derived from statistical rupture length--magnitude and acceleration--magnitude relationships of historic earthquakes. The resulting attenuation curves are then used to estimate the average bedrock accelerations and the predominate period of the shock wave. Earthquake duration of California seismic events is derived from an empirical fault rupture rate of one-half second for every mile of rupture length. The duration which has been estimated represents the total duration of credible seismic events on a specific fault.

It should be understood that the total earthquake duration will not be at the average bedrock acceleration as shown on Tables 1 and 2. A breakdown of the total duration is as follows: for bedrock sites, the latter portion of the first one-third of the seismic record will experience horizontal accelerations approximating the average bedrock acceleration estimated; the middle one-third will rapidly attenuate from the initial higher levels; and the last one-third of the record will be attenuated even further.

1.5.2 Modes of Earthquake Damage

Damage from seismic events are due to four basic characteristics of fault movement. They are:

- ground shaking;
- surface faulting;
- ground failure; and
- seismic sea waves and seiches.

1. Ground Shaking

Ground shaking is probably the most damaging result of an earthquake, because of the large areas subject to shaking (San Francisco 1906, 8.3 magnitude felt over 375,000 square miles). Strong motion lasting a few seconds in a moderate earthquake to as much as four minutes in a great earthquake is exaggerated on loose, water-saturated ground,

and less on solid rock. The parameters for ground shaking have been described above. From Tables 1 and 2, it can be determined that the highest bedrock motion affecting Hawaiian Gardens is controlled by the distance to the fault and the magnitude of the fault movement.

2. Surface Faulting

In a moderate earthquake, fault rupture along a rough plane in rock at average depths of 3 to 10 miles may or may not extend to the surface. Most, if not all, moderate California earthquakes have been accompanied by surface faulting. Surface faulting develops scarps, grabens (trenches), fractures, and "mole tracks" or pressure ridges. Sometimes spasmodic slippage ("creep") occurs along many active faults, with and without earthquakes. Movement directions may be right or left lateral, reverse, normal or oblique slip.

All great earthquakes in California have been accompanied by several feet of surface fault displacement: San Francisco 1906 maximum 20 feet horizontal, right lateral; Fort Tejon 1857 estimated 30 feet right lateral. These are two of the greatest earthquakes to occur in California history.

Since no known fault crosses the City of Hawaiian Gardens, surface faulting is not anticipated within its boundary.

3. Ground Failure

Various types of ground failures accompany earthquakes. These include landslides; fracturing, cracking, and fissuring; liquefaction of sand layers; compaction, subsidence, uplift and tilting.

a. Landsliding

Mass movements of loose rock, soil, and water-saturated, weathered materials are major effects in all earthquakes large enough to be felt. These consist of landslides, rock avalanches, rock falls, mud and debris flows and all types of gravitational movements from very minor to extremely large. Steep slopes favor such mass movements, and slides in highway cuts and downhill road shoulders are common after earthquakes.

Since Hawaiian Gardens has relatively flat topographic relief, damage from mass movements is not anticipated.

b. Fracturing, Cracking, and Fissuring

Ground shaking, settling, compaction of earth, and sliding produce irregular fractures, cracks, and fissures from a few inches to many feet in length. Such fractures may displace soil and earth in a manner similar to faults. Fractures of this type are rare in bedrock, but are most significant in weathered rock, alluvium, and soil. Extensive fissuring and lurch cracking may occur in weak soil and alluvial basins up to 75-80 miles from the epicenter of a great earthquake surface. Fracturing, cracking and fissuring within the City of Hawaiian Gardens are not anticipated because of the depth of the alluvium.

TABLE 1
ACTIVE FAULTS

FAULT	<u>Estimated Parameters</u>			
	Average Bedrock Acceleration (G)	Predominant Motion Period (Secs.)	Duration (Secs.)	Magni- tude (Richter)
NEWPORT-INGLEWOOD				
Distance to Hawaiian Gardens (miles):	5			
Date of Historic Activity:	1933			
Historic Magnitude:	6.3			
Full Length	.30	.24	21	7.4
Half Length	.20	.24	10	6.9
1/5 Length	.16	.24	4	6.3
NORWALK				
Distance to Hawaiian Gardens (miles):	4			
Date of Historic Activity:	1929			
Historic Magnitude:	4.7			
Full Length	.28	.24	10	6.9
Half Length	.15	.24	5	6.4
1/5 Length	.10	.24	2	5.9
RAYMOND				
Distance to Hawaiian Gardens (miles):	16			
Full Length	.26	.34	15	7.3
Half Length	.21	.34	7	6.8
1/5 Length	.09	.34	3	6.1

TABLE 1
ACTIVE FAULTS
(continued)

FAULT	<u>Estimated Parameters</u>			
	Average Bedrock Acceleration (G)	Predominant Motion Period (Secs.)	Duration (Secs.)	Magni- tude (Richter)
SAN ANDREAS				
Distance to Hawaiian Gardens (miles):	43			
Date of Historic Activity:	1857			
Historic Magnitude:	8.0+			
Full Length	.21	.50	110	8.5+
Half Length	.19	.50	55	8.0
1/5 Length	.14	.50	22	7.5
SAN FERNANDO				
Distance to Hawaiian Gardens (miles):	33			
Date of Historic Activity:	1971			
Historic Magnitude:	6.4			
Full Length	.13	.41	9	6.6
Half Length	.08	.41	5	6.3
1/5 Length	.07	.41	2	5.9
WHITTIER				
Distance to Hawaiian Gardens (miles):	10			
Date of Historic Activity:	1987			
Historic Magnitude:	5.9			
Full Length	.26	.30	12	7.0
Half Length	.18	.30	6	6.6
1/5 Length	.10	.30	2	6.0

TABLE 2
POTENTIALLY ACTIVE FAULTS

FAULT	<u>Estimated Parameters</u>			
	Average Bedrock Acceleration (G)	Predominant Motion Period (Secs.)	Duration (Secs.)	Magni- tude (Richter)
MALIBU COAST				
Distance to Hawaiian Gardens (miles): 26				
Full Length	.23	.39	15	7.3
Half Length	.18	.39	7	6.8
1/5 Length	.11	.39	3	6.1
SAN GABRIEL				
Distance to Hawaiian Gardens (miles): 25				
Full Length	.25	.39	24	7.8
Half Length	.22	.39	12	7.2
1/5 Length	.15	.39	5	6.5
SANTA MONICA				
Distance to Hawaiian Gardens (miles): 18				
Full Length	.25	.38	8	6.6
Half Length	.22	.38	4	6.4
1/5 Length	.19	.38	2	5.9
SIERRA MADRE				
Distance to Hawaiian Gardens (miles): 20				
Full Length	.25	.38	14	7.2
Half Length	.20	.38	7	6.7
1/5 Length	.14	.38	3	6.0
VERDUGO				
Distance to Hawaiian Gardens (miles): 17				
Full Length	.28	.38	9	6.9
Half Length	.21	.38	5	6.4
1/5 Length	.18	.38	2	5.9

c. Compaction, Subsidence, and Uplift

Compaction of loose soils and poorly consolidated alluvium occur as a result of strong seismic shaking. Occurrences of this mode of ground failure are patterned irregularly and are controlled in part by bedrock surfaces and mode of deposition (stream beds, swamps, old lakes, etc.). Amounts of compaction may vary from a few inches to several feet and may be significant in areas of thick soil cover.

Tectonic subsidence, uplift tilting, and warping are considered insignificant for the City of Hawaiian Gardens.

d. Liquefaction

The American Geological Institute defines liquefaction as "the sudden large decrease of shearing resistance of cohesionless soil, caused by a collapse of the structure by shock or strain, and associated with a sudden but temporary increase of the pore fluid pressure (ASCE, 1958, term 205). It involves a temporary transformation of the material into a fluid mass." From the definition quoted, it is obvious that shallow groundwater is a necessity for liquefaction to occur. Liquefaction susceptibility in Hawaiian Gardens is low, as illustrated in Figure 8.

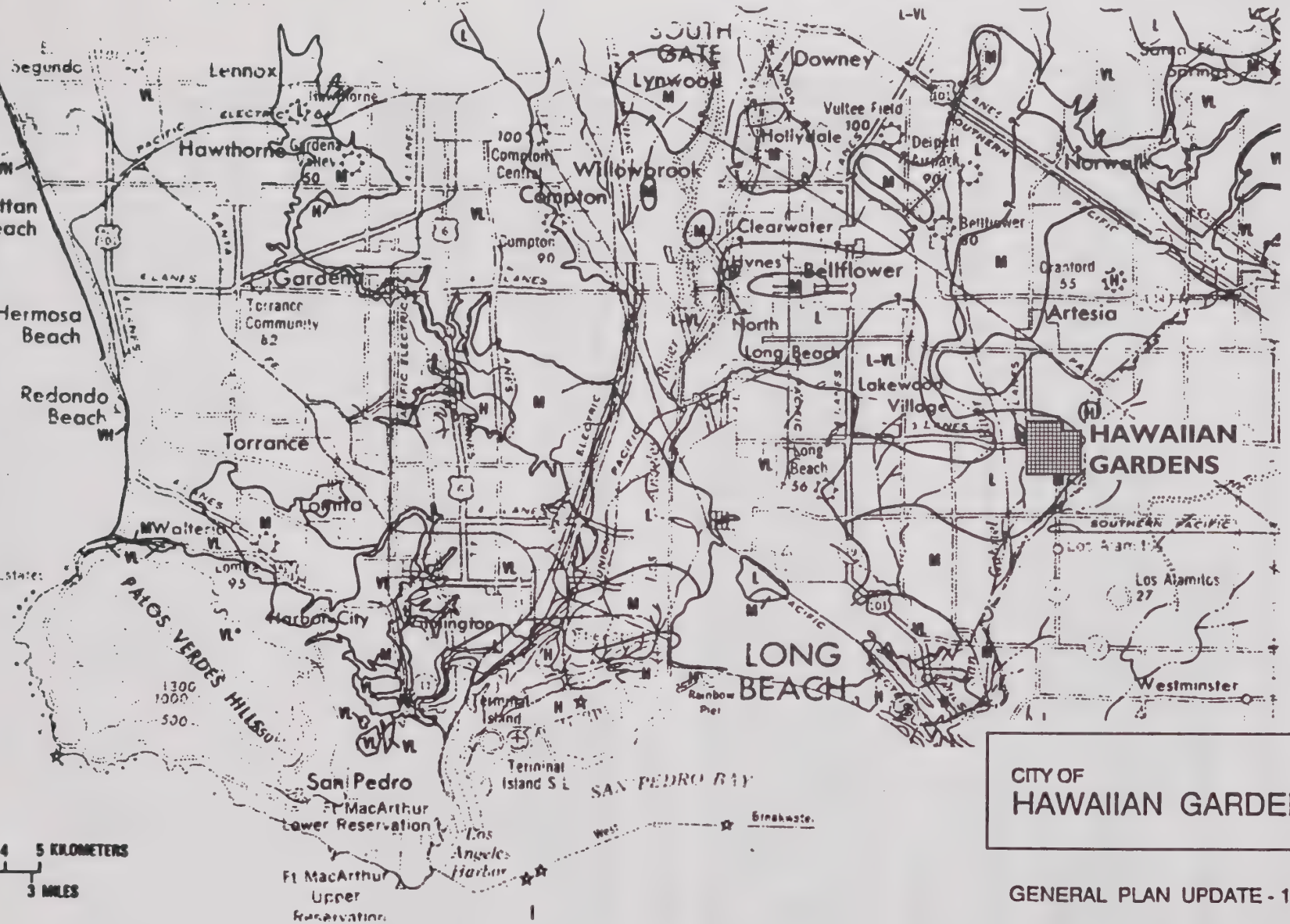
4. Seismic Sea Waves and Seiches

Seiches, or periodic oscillations ("sloshing") of bodies of water such as ponds, lakes, and bays, usually occur in moderate to great earthquakes. Seiches may raise and lower a water surface from a few inches to several feet, and may occur several thousand miles away from the earthquake epicenter.

A seismic sea wave, or tsunami ("tidal wave"), is a wave which moves at velocities of 300-400 miles per hour and may be many miles long in deep open water. Approaching the shore, the wave may reach a height of 50 feet. Seiches and tsunamis will not affect the City of Hawaiian Gardens because of its inland setting and because no significant bodies of water exist within the city limits.



MONICA BAY



CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

**LIQUEFACTION
SUSCEPTIBILITY**
SAFETY ELEMENT

LOCKMAN &
ASSOCIATES

8
FIGURE

LEGEND
H High
M Medium
L Low

SOURCE: ZIONY, 1985

2.0 EXISTING CONDITIONS

The City of Hawaiian Gardens has several existing conditions that provide the public with a safe living environment. Although the potential for damage resulting from future earthquakes cannot be ignored, Hawaiian Gardens is characterized by a number of factors which tend to reduce earthquake hazards. Foremost among these are the relatively low density character of the community and the comparatively high level of seismic hazard awareness on the part of residents of the community and public officials.

Low density reduces the chances that any one fire would affect large numbers of people. The relative newness and low density form of the community are definite assets when perceived in terms of seismic susceptibility. Future intensification trends will benefit from modern seismic design and construction technology, creating a positive environment for the total community.

Two other conditions that relate to the character of the City include near complete buildout of the City and its location on a generally level flood plain. For these reasons, the City is not susceptible to the dangers from brush fires, slope instability, general subsidence, differential settling, or erosion.

Two other advantages are the quality of local fire control agencies, and the existence of many high quality disaster response agencies which serve the City. The Fire Department is very highly rated and is willing to take advantage of new methods and equipment. They are also tied into a countywide response program which allows them to handle most emergencies. Mutual aid agreements combine the disaster response capabilities of many agencies and jurisdictions, including neighboring cities and counties, enabling adequate response to most foreseeable emergencies. The two existing emergency response plans, the Los Angeles County Disaster Relief Manual and Basic Emergency Operations Plan, provide the tools to coordinate the disaster recovery operations of county fire control and law enforcement agencies with local agencies and governments.

Hawaiian Gardens is fortunate in having a number of ordinances, programs and requirements already in existence pertaining to seismic and fire hazards. Primary among these are the subdivision and building permit approval requirements for seismic strengthening, adequate access, and minimum fire flow pressure.

Public awareness of earthquake and fire hazards is another important consideration. The citizens are most cooperative in adhering to regulations, and this awareness and cooperation contributes to understanding and proper action during an actual emergency.

3.0 ISSUES AND PROBLEMS

Approximately 98 percent of Hawaiian Gardens has been committed to urban uses. Local development patterns have historically consisted of outward expansion, accompanied by gradual aging and intensification of uses in the older areas of the urbanized community. This trend is demonstrated by the fact that approximately 90 percent of the total net additions to the City's housing inventory over the past three years have been multiple units. The urban form which is evolving is susceptible to a variety of seismic and fire-related hazards.

Two major areas of concern have been identified:

1. protection of existing population; and
2. development and management of future population and development.

It may be postulated that a seismic or fire-related event becomes hazardous only when it impacts human population and activities. The severity of impact is dependent not only on underlying geologic conditions in the case of seismic hazards, but on the character of population, activities, and associated structures as well. Based on this assumption, the conditions which seem to imply the greatest fire and seismic hazard potentials in terms of existing population and development are identified below.

3.1 Residential and Industrial Hazards

3.1.1 Fire and Seismic Hazards

Fire service is provided to the City by a three-man crew at Fire Station No. 34, located at 21207 South Norwalk Boulevard. The station has one captain, one engineer, one firefighter and one pumper truck. During 1991, a total of 138 fires occurred within the City, with an estimated loss of \$28,500. During 1990, there were 156 fires with an estimated loss of \$332,300. During 1989, there were 135 fires and losses of \$57,700. The majority of these fires did not occur in buildings or related accessory structures. Building fires accounted for only 10 fires each year. Such fires occur for a number of reasons, and no geographical or causative pattern is apparent.

In compliance with S.B. 547, the City of Hawaiian Gardens was inspected by the County of Los Angeles, Department of Public Works, District Building and Safety Engineer on November 28, 1989; and there is no unreinforced masonry (URM) buildings in the City (see Appendix C).

3.1.2 Fire and Earthquake Insurance

Although some major insurance companies offer fire and earthquake insurance, many citizens are unaware of this fact. Those persons who are aware of its existence feel that coverage restrictions and high deductible provisions make the protection unworthy of additional premium expenses. Since the 1989 San Francisco-Loma Prieta earthquake, and the 1990 Santa Barbara fire, much attention has been focused on the problem of disaster insurance and pressures to improve coverage provisions have been generated.

3.1.3 Multi-Story Buildings and Dependent Populations

As multi-story buildings are being constructed, the concentration of larger numbers of occupants inside these structures intensifies the potential for a disaster. In addition, the use and structural characteristics, combined with difficulties related to emergency response and disaster control procedures, make medium and high-rise development particularly susceptible to fire or seismic hazards.

Dependency on internal support systems, including ventilation, water availability and pressure and elevator systems, increases the sensitivity of multi-story structures to fire or seismic hazards. Such systems may fail during a fire or earthquake when they are most critically needed.

There are individuals and groups that cannot, due to age, disability, or confinement, be expected to adequately respond to stress situations resulting from seismic or fire-related events. These individuals and groups include the physically and/or mentally handicapped, the very old and the very young. The 1990 census indicates that there are 1,561 residents under five years of age, and nearly 300 adults over 75 years of age within the City. Some dependent populations are concentrated in institutional facilities or areas catering to their particular needs. Others, such as the very young, are dispersed throughout the urban area. In instances where there is a large population of dependent individuals, supervisory or custodial personnel may be inadequate to provide guidance in times of emergency. Such a situation presents a potential for chaos resulting in otherwise avoidable deaths and injuries.

Emergency response and disaster control procedures become increasingly difficult with taller buildings. Access of personnel and equipment to upper story fires is a major problem. Evacuation of building occupants is another. Helicopter lift-offs or aerial ladder evacuation may be required if smoke or mechanical failures block normal exit routes. Inadequate or inoperable internal communication systems hinder efforts to locate and evacuate trapped occupants.

3.1.4 Industrial Fire Hazards

Hazards of transportation, manufacturing, and storage of volatile products present additional fire potential. New industrial processes and the development of new fuels, plastics, and chemicals have required continuous upgrading of fire control technology and contingency planning. These efforts are directly related to the physical and economic well being of the industries, industrial employees, and the general public. The impact of hazardous materials is further discussed in the Waste Management Element.

3.2 Public Building and Facilities

3.2.1 Hospital and Medical Facilities

Hawaiian Gardens residents are served by three hospitals: Charter Community Hospital within the City at Pioneer and 215th Street; Artesia Community Hospital at Artesia and Pioneer Boulevard; and Los Alamitos Community Hospital at Katella just east of Los Alamitos Boulevard. No convalescent facilities are provided for chronically ill or convalescent patients.

The activities and populations associated with these facilities are particularly sensitive to seismic and fire hazards. Hospitals, offering a wide variety of medical services, rely on highly sophisticated and sensitive equipment for a number of life-maintenance functions. Fire or earthquake damage to such equipment would directly affect the safety and well being of present and future patient populations.

Facilities vital to post-disaster response efforts include fire control and law enforcement facilities, hospitals, and emergency operations control and communication centers. It is imperative such facilities be able to withstand the effects of a major disaster and remain fully functional. In this regard, factors warranting careful consideration include seismic design and construction requirements, site location and accessibility, impacts resulting from damage to adjacent buildings, and the degree of usability of vital facilities following a major disaster.

3.2.2 Indoor Public Assembly Facilities

Many structures can be categorized as indoor public assembly facilities. Such facilities include entertainment, religious and recreational establishments, as well as public and semi-public institutions. These include churches, schools, auditoriums and gymnasiums.

The one characteristic common to all public assembly facilities is the concentration of large numbers of people. This condition provides the potential for mass panic response to a crisis situation. A mass response of this nature can ultimately cause more casualties than the originating event. Factors including unfamiliar surroundings, lack of knowledge concerning exit routes, and loss of orientation heighten the disaster potential. When a disaster occurs in a crowded facility and causes extensive damage and injury, provision of required medical aid is difficult.

3.2.3 Infrastructure

The City of Hawaiian Gardens is dependent on a complex web of infrastructure for a variety of vital support functions. Such functions include the importation and distribution of water supplies, collection and disposal of sewage, the channeling of storm runoff, provision of natural gas and electrical power, communications, and transportation. Seismic or fire-caused interruption of such functions would, in varying degrees, impact the safety and welfare of City residents.

3.2.4 Slope Stability/Flooding

Since the City is relatively flat, no slope stability problems are anticipated. The only major slopes within the City are the engineered fills of the San Gabriel (605) Freeway.

Analysts describe floods of different sizes in terms of their statistically projected frequency. For example, a 100-year flood is the size flood which has a 1.0 percent chance of occurring in a given year, while a 500-year flood is one which has a 0.2 percent chance of happening in any year. A 500-year flood would be slightly deeper and cover a greater area than an 100-year flood.

The San Gabriel River Channel lies west of the City of Hawaiian Gardens, and is designed to contain a 100-year flood. The Channel is fully operational and is maintained by the U.S. Army Corps of Engineers (Corps) and the Los Angeles County Department of Public Works (County). The construction of San Gabriel River improvements in 1947 reduced the local

area's risk of flooding, and Los Angeles County Drainage Area (LACDA) studies performed by the Corps have shown no deficiencies along the San Gabriel River in the vicinity of Hawaiian Gardens.

The Corps and the County built the existing flood control system to maintain the largest possible flood to strike the Los Angeles Basin, based on information available in the 1930's. Since then, data has been accumulated relating to flood size and frequency. Major portions of the storm drain system in the Los Angeles County were upgraded to their current capacity in the 1960's.

The City of Hawaiian Gardens participates in the National Flood Insurance Program which provides federal insurance to those structures, both residential and commercial, which are within the 100-year floodplain, provided all new structures within the City are elevated one-foot above the 100-year floodplain.

3.2.5 Schools

After the Long Beach earthquake of 1933, the California State Legislature passed the Field Act, requiring all school structures to be earthquake resistant. Presently, no grade schools built prior to 1933 are in operation in the City of Hawaiian Gardens.

Other considerations include the concentration of large student bodies within single structures, problems related to the supervision of younger children during post-disaster periods, and difficulties in reuniting children with their parents.

The ABC Unified School District currently has a disaster plan which varies from resuming classes and sending children home on regular bus routes to holding children in schoolyards for parent pickup. The specific post-disaster action depends on the extent of area damage.

3.3 Disaster Response Problems

In a review of disaster response efforts after the 1971 San Fernando and the 1987 Whittier earthquakes, the Los Angeles County Earthquake Commission determined that while most agencies responded well, and the problems encountered were within their capabilities to solve, there were inadequacies.

One problem that must be dealt with is the initial assessment of damage. Despite immediate reconnaissance operations launched by police and fire officials, some areas heaviest hit by both earthquakes were not discovered until well after the events.

A problem related directly to that of damage assessment is the loss of communications. Communications systems are an essential element in the conduct of emergency operations. It seems clear that any communication system dependent on land lines and commercial power is susceptible to earthquake damage.

Another major problem of disaster response and recovery operations is that of evacuation. This involves the identification of areas or structures requiring evacuation, determination of available evacuation routes and modes, and establishment of assembly points for displaced persons. The potential for widespread damage resulting from a major quake complicates evacuation efforts.

Other factors which could significantly inhibit response and recovery operations include loss of

adequate water pressure for fire control purposes and blockage of transportation corridors resulting in the isolation of critically damaged areas. These situations were not commonly encountered in 1971, but in the 1987 Whittier Narrows earthquake, severe structural cracks occurred within the foundation of the interchange between Interstate Highways 5 and 605, which normally handles 400,000 vehicles each weekday, causing CalTrans officials to close it for one day for temporary repairs. Also, the 1989 Loma Prieta-San Francisco earthquake saw the collapse of the Nimitz Freeway.

The situation at San Fernando Veterans' Hospital following the 1971 quake provides an example of how many problems combine to frustrate emergency response efforts. The first shocks of the earthquake were felt by county residents shortly after 6:00 a.m. The damage at San Fernando Veterans' Hospital was discovered by Los Angeles City Fire Department personnel at 7:23 a.m. Although City fire control units were immediately dispatched to the scene, the County Fire Department responsible for this unincorporated territory was not notified until 9:05 a.m. The County Sheriff's Department was informed at 10:30 a.m. Further communication problems resulted in agencies responding to calls for aid without knowing the extent of damage, or even if another agency had already responded.

3.4 Summary of Hazards

Environmental hazards occurring in the City of Hawaiian Gardens can be divided into two major categories: naturally occurring hazards and manmade hazards. Naturally occurring hazards include earthquakes, wildland fires, floods, and slope failure. Chemical contamination, structural and chemical fires, transportation accidents and air and water pollution are examples of manmade hazards. Additional manmade hazards are also discussed in the Waste Management Element.

The precise nature and level of risk to the community for various hazards is dependent on a variety of environmental and cultural factors. For example, proximity of a structure to an earthquake fault does not necessarily determine the potential for damage to that structure. Groundwater levels, soil composition and geologic substructure are environmental factors which can influence the potential for structural damage and loss of life during a seismic event.

An assessment of the risk potential for environmental hazards in the City of Hawaiian Gardens area is summarized in Table 3. Included in the table are the expected geographic extent and levels of emergency response needed to deal with the event. Each potential hazard to the public safety has been assessed according to the following levels of risk:

1. **Low Risk** - The level of risk below which no specific action is deemed necessary. The occurrence of a specific event is unlikely.
2. **Medium Risk** - The level of risk above which specific action is required to protect life and property, though the probability of the event taking place is low to moderate.
3. **High Risk** - Risk levels are significant and occurrence of a particular emergency situation is highly probable or inevitable.

The "scope of risk" refers to the geographic area that could be potentially affected with the occurrence of one of the hazards. The scope of risk also includes three levels:

1. Local - The affected geographic area that is directly affected is localized or site specific.
2. Citywide - The affected area includes a significant portion or all of the City.
3. Regional - The affected area includes the entire City as well as the surrounding region.

The State Office of Emergency Services (OES) has established three levels of emergency response to peacetime emergencies, which are based on the severity of the situation and the availability of local resources in responding to that emergency. The three levels of emergency response include:

Level 1: A minor-to-moderate incident wherein local resources are adequate in dealing with the current emergency.

Level 2: A moderate-to-severe emergency where local resources are not adequate in dealing with the emergency and mutual assistance would be required on a regional or statewide basis.

Level 3: A major disaster where local resources are overwhelmed by the magnitude of the disaster and State and Federal assistance are required.

Those hazards of greatest concern to Hawaiian Gardens residents are evident from the examination of the "level of risk" columns in Table 3.

3.5 Emergency Preparedness Plan

The emergency response capability within Hawaiian Gardens is geared primarily toward non-disaster incidents, and police and fire capabilities will be overwhelmed in a large disaster.

Effective implementation of seismic policies will help reduce the magnitude of damage in an earthquake, but a variety of damage should still be anticipated. Effective response to a disaster or to a warning of disaster is essential to life saving and the reduction of subsequent property damage and social dislocation.

The City of Hawaiian Gardens' Emergency Preparedness Plan is a document which addresses the jurisdiction's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and nuclear operations. The plan does not apply to normal day-to-day emergencies and the well-established and routine procedures used in coping with such emergencies. Instead, the operational concepts reflected in the plan focus on potential large-scale disasters which can generate unique situations requiring unusual responses. Such disasters pose major threats to life and property and can impact the well being of large numbers of people.

The Emergency Preparedness Plan is placed into effect immediately upon the existence or declaration of a state of emergency for the state or nation. It may also be placed into effect in case of local disaster by action of City officials.

Table 3
Environmental Risk Analysis

Environmental Hazard	Potential of Occurrence			Scope of Risk			Emergency Response		
	Low	Medium	High	Local	City	Regional	Level 1	Level 2	Level 3
Earthquake									
Surface rupture	●			●			●		
Liquefaction	●			●			●		
Ground-shaking			●			●	●		
Slope failure	●						●		
Tsunami	●						●		
Dam failure		●			●			●	
Landslide	●			●			●		
Flooding									
Local ponding		●		●				●	
50 year flood		●			●			●	
100 year flood		●			●			●	
Fire									
Industrial		●		●			●		
Chemical		●		●			●		
Gas main		●		●			●		
Subsurface		●		●			●		
High-rise	●						●		
Wildland	●					●	●		
Chemical Contamination									
Road spill		●		●				●	
Airborne		●		●			●		
Subsurface		●		●			●		
Radiological		●			●			●	
Severe Airborne Pollution Episode		●				●		●	
Major Accident									
Industrial		●		●				●	
Major road			●	●				●	
Aircraft			●	●				●	
Railway	●			●				●	
Water Shortage									
Supply		●				●		●	
Distribution		●			●		●		

The Plan provides overall organizational and operational concepts for responding to various types of identified hazards. Included are listings of responsible response agencies, emergency action checklists for hazard-specific responses, and operational data such as listings of resources, key personnel, essential facilities, etc. The Plan is updated on a periodic basis to improve disaster response and recovery operations.

In a major disaster, mutual aid sources in adjacent jurisdictions are likely to be fully committed to their own needs, and there may be substantial delays in the request and transport of assistance from more distant locations. Ingress to and egress from the City is likely to be inhibited by damage caused by the disaster and related congestion and accidents.

Effective disaster preparedness will require the concerted efforts of City agencies, residents, and the business community. Not only must effective plans and procedures be in effect, but those plans should be tested and improved through frequent disaster exercises.

3.5.1 Planning for Post-Disaster Recovery

The City's ultimate post-disaster survival will depend not only on the effectiveness of hazard mitigation and disaster response programs, but also on how quickly and how well the City is rebuilt after a major disaster. Without preplanning, effective programs and options for rapid reconstruction will not be responsible in the immediate aftermath of an earthquake, fire, or other disaster.

A damaging disaster presents both problems and opportunities in urban land-use management. For example, if there are larger areas of substantial damage, there may be need for short-term redevelopment. This would also provide opportunities for upgrading of the City through such measures as revised street and traffic patterns, parking, architectural and landscape design, and general land-use compatibility. It would also provide an opportunity to mitigate specific hazards discovered in the disaster.

3.5.2 Management of Future Development

By 2010, it is projected that a population of approximately 16,400 people will reside in Hawaiian Gardens. Seismic and fire hazards affecting existing populations in the City may, in some instances, apply to over 2,700 new residents as well. However, the susceptibility of additional population and growth is more directly related to necessary expansion and intensification of existing urban uses.

The low-density character of Hawaiian Gardens has been mentioned as a positive factor in terms of general safety. The incremental intensification of existing urban uses required to accommodate future populations may to some degree increase susceptibility to fire and/or seismic events.

The expansion of urban uses is preceded by, or accomplished in conjunction with, the expansion of infrastructure, and the provisions of a wide range of vital services and facilities. Location of these services, facilities, and systems will most certainly be influenced by factors other than optimal safety considerations.

A number of procedural issues come into focus when future growth is viewed in terms of fire and seismic safety. Among the more important concerns is the question of property rights, public liability, and the local government's role in identifying and mitigating unacceptable risks.

4.0 OPPORTUNITIES

This document has so far presented a variety of fire and seismic hazards and problems which pose potential threats to the safety and well-being of Hawaiian Gardens' citizens. It is the responsibility of the City and other agencies to reduce or avoid such hazards wherever possible. Many of the means for accomplishing this have been mentioned in Section 2.0 - Existing Conditions. However, additional factors provide opportunities to reduce public exposure to fire and seismic hazards.

It is anticipated that the City will experience additional physical, social, and economic growth during the next several decades. Much of this growth will be in the form of renovation and redevelopment of the existing older areas of the City. Hawaiian Gardens is presented with the unique opportunity to guide and direct the energies and interests of private industry toward the reduction of safety hazards.

Many existing City programs deal directly with public safety concerns. The existence of these programs and the ever-increasing knowledge derived from them provides City government with continuous opportunities to reduce unacceptable levels of risk associated with various safety hazards.

5.0 GOALS AND POLICIES

The goals of the Safety Element link the existing conditions, problems, and opportunities identified previously, with the policies and programs which follows. Goals reflect broad aims and basic values. They establish emphasis and tone for policy and program formulation. The decisions and activities of City government pertaining to safety should be guided by the intent of the goals set forth.

The policies of the Safety Element provide direction for the achievement of element goals, and they will be carried out by the implementation of programs which utilize organized governmental resources for the mitigation or elimination of safety hazards.

The purpose of the Safety Element is to strive towards achievement of the following major goals and policies. The policies and programs are offered as a means of realizing their related goals.

GOAL 1

The City of Hawaiian Gardens shall strive to ensure the protection of the life and property of its residents.

Policies

- 1.1 Reduce the impact of fire and earthquake hazards in the hospital, other medical facilities, and indoor public assembly facilities; review and improve, as necessary, site design and construction requirements for these facilities, and encourage the strengthening of any facilities not meeting current standards.
- 1.2 Strengthen earthquake resistance standards for non-structural components of medium-rise buildings, including external veneers, internal partitions, lighting fixtures, furnishings, elevators, and equipment.
- 1.3 Support the use of new technology in the suppression and prevention of fires and floods, and in the construction of seismically safe buildings.
- 1.4 Encourage the use of smoke alarms and sprinkler systems in all structures.
- 1.5 Improve fire and seismic safety programs for schools.

GOAL 2

The City shall strive to reduce the adverse economic, environmental, and social conditions resulting from fire, seismic, and flood hazards.

Policies

- 2.1 Establish and enforce standards and criteria to reduce unacceptable levels of fire, seismic and flooding risk.
- 2.2 Encourage continued research in the field of fire and seismic safety.

- 2.3 Strengthen existing codes and ordinances pertaining to fire, flooding, and seismic hazards.
- 2.4 Adopt and enforce selective land use and building regulations within areas of higher seismic and fire hazard.
- 2.5 Provide for the needs of dependent populations in earthquake response and recovery operations.
- 2.6 Improve the water supply system as funds become available.
- 2.7 Expand public education programs pertaining to fires, seismic safety, and flooding.
- 2.8 Encourage improved fire, earthquake, and flooding insurance programs.
- 2.9 Review and improve disaster preparedness and emergency response capabilities.
- 2.10 Develop greater public awareness and understanding of potential safety risks.
- 2.11 Increase cooperation and coordination between the various jurisdictions and agencies involved in fire, seismic, and flood protection.

GOAL 3

Determine the locations of potential sources of danger within Hawaiian Gardens, and strive to minimize them.

Policies

- 3.1 Require all new development and selected existing development to comply with established safety standards.
- 3.2 Encourage improved fire and seismic protection for multi-story structures and high-hazard industrial facilities.
- 3.3 Promote modified standards for medium- and high-rise development, incorporating safety considerations pertaining to building set-back, access, and general site design.
- 3.4 Improve fire and seismic design and construction standards for facilities housing dependent populations.
- 3.5 Encourage the strengthening or demolition of school facilities which are fire hazards.
- 3.6 Encourage detailed site evaluations and improved design and construction standards for infrastructure.

6.0 STANDARDS AND CRITERIA

Safety standards and criteria provide the tools required to evaluate the adequacy of programs and practices employed to reduce disaster impacts. They establish a basis for comparison in measuring unacceptable levels of risk. In addition, they offer a means of comparing the effectiveness of existing practices with the goals and policies set forth in this element. The responsibility for establishing criteria and standards rests primarily with the local jurisdictions. The State has established some standards, but has left local government the task of enforcing them.

Standards are specific quantitative measures. Conversely, criteria are general rules, and usually nonquantitative. The following paragraphs include a brief description of safety and seismic safety standards currently in effect, and a somewhat longer discussion of criteria for integrating the concept of "acceptable risk" into the decision making process of the City of Hawaiian Gardens.

6.1 Standards

Standards for seismic design and construction have been employed in Los Angeles County since 1933. These first standards, developed in response to the damage caused by the 1933 Long Beach earthquake, have been continuously revised and expanded.

Although there is no single unified set of safety standards, Hawaiian Gardens has evolved a series of standards, specifications, and regulations which apply to safety. These standards are incorporated into various codes and ordinances, including, but not limited to, the Building Code, the Fire Code, the Grading Ordinance, the Zoning Ordinance, the Subdivision Ordinance, and the Health and Safety Code.

6.2 Criteria

Criteria stress the achievement of program excellence or an ideal state beyond the framework of minimum standards. A framework for developing criteria to define unacceptable risk is contained in the following treatment of Acceptable Risk. While the emphasis is on seismic risk, the concept is equally applicable to fire risks.

Review and revision of local safety standards is an ongoing process. Recommendations for modifications and additions are included in the Implementation Program of this element.

6.2.1 Criteria for Evaluating Risk

The State guidelines for developing a Safety and Seismic Safety Element introduced the concept of "acceptable risk", and suggested that it be used as a guide for formulating plan policies and programs. Specifically, the guidelines suggest that a Policy Statement be included in the element which specifies the level or nature of acceptable risk to life and property. It is further recommended that land-use standards be developed which reflect an acceptable level of hazard or risk.

There are three charges given to public officials by the Governor's Earthquake Council: (1) to reduce loss of life; (2) to reduce damage to property; and (3) to reduce economic and social dislocations resulting from future earthquakes. These three concerns are not contradictory or independent but they are distinct. For any single project, there are essentially three separate risks which must be evaluated: the risk to human life, the risk to property, and the risk of

disruption. An example of the latter is utility structures which, if damaged, may produce little in the way of direct effect on safety and property but would greatly disrupt the functioning of the community and its services for some time.

In recognition of this fact, disaster preparedness programs have been developed in cooperation with safety considerations and studies. Proper pre-disaster, as well as post-disaster planning, cannot proceed intelligently without a reasonable assessment of the risks of certain types of existing and future development.

Inevitably, any undertaking has a certain level of risk associated with it, and a trade-off always exists between cost and risk reduction. Therefore, the simple statement that we must eliminate or reduce risk as far as possible is both impractical and unnecessarily restrictive. The acceptability of risk depends on the nature of the risk. At some level a risk becomes in some way "acceptable".

Another factor in the acceptability of risk is the determination of who is taking the risk versus who is receiving the benefit. In order for there to be a meaningful use of risk-versus-benefit for planning purposes, the persons who are subjected to the risk should as much as possible be receiving the benefit. Those subjected to risk should be made aware of that risk and the potential harm it represents. Representative risks in daily life are presented in Table 4.

TABLE 4
RISKS OF FATAL INJURY - REPRESENTATIVE RISKS IN DAILY LIFE

Cause	Individual Probability of Fatal Injury per hour of exposure
Natural disasters	1 chance in 10 billion
Fossil Power Plants	2 chances in 10 billion
Radiation (100 mrem/year)	5 chances in 10 billion
Electricity	10 chances in 10 billion
Smoking	5 chances in 10 million
Hunting	9 chances in 10 million
Skiing	9 chances in 10 million
Commercial Aviation	10 chances in 10 million
Motor Vehicles	10 chances in 10 million
Natural Diseases	10 chances in 10 million
General Aviation	3 chances in 10 thousand

These are average values. Some persons are subjected to higher risks from natural disasters, for example, because they live in earthquake zones or tornado areas, etc.

It is generally considered that the level of risk represented by natural disease is the maximum acceptable to large numbers of people for most normal activities. In addition, only voluntary activities, that is, activities where the individual person has a choice whether or not to participate, are acceptable as the risk approaches the level represented by natural disease.

There are many situations involving human safety which at any one time have an extremely high risk potential. No one is able to calculate a meaningful estimation of total risk in these instances. However, by separating total risk into several parts, all of which can be dealt with more or less independently, total risk can be estimated and measures taken to mitigate it. The following hypothetical risk analysis separates seismic risk into four factors which can be viewed independently.

6.2.2 Hypothetical Risk Analysis

1. The number and magnitude of earthquakes in the fault systems near the area in question for the period questioned would be determined.
2. The expected ground motion effect on slope stability, liquefaction, etc., would be determined for each type of earthquake possible. This would be determined on the basis of site characteristics, soil, depth to bedrock and distance to fault.
3. The response of the construction (buildings, utilities, roads, etc.) to the ground motions expected above would be determined. This would include factors such as the orientation, contents, parapets, as well as the type of construction.

The above steps are summarized as follows:

(General Geology) x (Specific Site) x (Structure) x (Uses) = Total Risk

One would prefer to be able to quantify the risks to such an extent that in each step an actual number, a probability of occurrence or risk, would be determined. For example, in Step 1, it might be determined that there is a 20% chance of an earthquake of magnitude 6 or greater in the next 20 years.

One must take into account the appropriate considerations and their risk under each of the four categories above. Table 5 is a list of different types of structures and their relative risks. This is not a complete table of structures and their relative risks. Additional considerations to items listed would include parapets, building interiors, utilities, building orientation and frequency response. Table 6 displays a list of uses and the levels of risk associated with each type of use indicated.

To keep in line with the Governor's Earthquake Council's specific charges, there should be three such risk analyses done. One to ascertain the risk to human life and limb, another to ascertain the risk to property and the third to ascertain the risk of social and economic disruption. Of course, in order to make the final decision as to approval of any project, the cost and benefit to the public must be considered. For the public agency and ultimate decision consists of identifying and balancing all the costs and risks, including aesthetics and long-term planning, so that the maximum amounts of public safety and benefit are achieved.

TABLE 5
HAZARD COMPARISON OF NON-EARTHQUAKE-RESISTIVE BUILDINGS

Simplified Description of Structural Types	Relative Damageability (in order of increasing susceptibility to damage)
Small wood-frame structures, i.e., dwellings less than 3,000 sq. ft. and 3 stories.	1
Single or multi-story steel-frame buildings with concrete exterior walls, concrete floors, and concrete roof. Moderate wall openings.	1.5
Single or multi-story reinforced-concrete buildings with concrete exterior walls, concrete floors. Moderate wall openings.	2
Large area wood-frame buildings and other wood-frame buildings.	3 - 4
Single or multi-story steel-frame buildings with unreinforced masonry exterior wall panels, concrete floors and concrete roof.	4
Single or multi-story reinforced-concrete frame frame buildings with unreinforced masonry exterior wall panels, concrete floors and concrete roof.	5
Reinforced concrete bearing walls with supported floors and roof of any materials (usually wood).	5
Buildings with unreinforced brick masonry having sandlime mortar; and with supported floors and roof of any materials (usually wood).	7
Bearing walls of unreinforced adobe, unreinforced concrete block, or unreinforced hollow clay tile.	Collapse hazards in moderate shocks

**Table 6
A SCALE OF RISKS**

	Level of Risk to Public	Kinds of Structures	Approximate Extra Project Cost to Reduce Risk to Acceptable Level
Failure of structure affects substantial populations	Extremely High	Structures whose continued functioning is critical, or whose failure might be catastrophic: nuclear reactors, large dams, power inter-tie systems, plants manufacturing explosive.	Unknown percentage (amount required for maximum attainable safety)
	Slightly lower than above	Structures critical to post-disaster use: important utility centers, hospitals, fire, police and emergency communication facilities and critical transportation elements, such as bridges and overpasses.	20% - 25% of project cost
Failure of structure affects occupants only	Possible High Risk to <u>occupants</u>	Structures of high occupancy, or convenient to post-disaster use: schools, churches, theaters, large hotels and other places normally attracting large concentrations of people, civic buildings, secondary utility structures, extremely large commercial enterprises, most roads, alternate or noncritical bridges and overpasses.	10% - 15% of project cost
	An "ordinary" level of risk*	The vast majority of structures: most commercial and industrial buildings, small hotels and apartment buildings, and single-family residences.	1% - 2% of project cost (2% - 10% occasionally)

* "Ordinary" risk: Resist minor earthquakes without damage; resist moderate earthquakes without structural damage, but with some nonstructural damage; resist major earthquakes of the strongest intensity and severity experienced in California, without collapse, but with some structural as well as nonstructural damage.

There is a relatively large amount of reliable data available about the probabilities of certain magnitudes of earthquakes. The ground motion studies and predictions which have been done are beginning to become accurate although they are not at such a stage that they can easily and economically be applied to every new site in order to produce quantitative information. However, apparently because there have been so few large earthquakes in recent years in California and thus the existing types of California building practices have not yet been tested, the qualitative response of various structures has not been determined. Earthquakes such as San Fernando (1971) and San Francisco-Loma Prieta (1989) have provided some information but more is needed.

A similar risk analysis can be done in a qualitative manner and arrive at a reasonable estimation of risk and a categorization into relative risks: high, questionable and low. On this basis, we can recommend a project be stopped, studied further with specific requirements or allowed to continue as is. If the risk came into the questionable category, we could lower the total risk by changing the factors at any or all of the steps outlined.

Factors that may be changed as discussed in the steps above, include the following:

1. At this point in time, it is not possible to control the frequency and magnitude of earthquakes. However, this may be possible in the future and there is research being done on this subject, as well as on the prediction of earthquakes;
2. Change the location of the project;
3. Change the type or design of the construction; and
4. Change the use of the construction.

There are four broad but separate categories to be dealt with in considering the risk and alleviation of the risk. The task of the public official is to bring what is known about the hazards in each of these categories together for a reasonable estimation of total risk. These categories are useful for another purpose. In addition to providing a means of establishing the total risk, the categories make it possible to recognize quickly what additional information is necessary in order to make a risk assessment and to reach a rational decision about a particular site and project and its geologic hazards.

7.0 IMPLEMENTATION PROGRAM

The critical factor in any planning effort is its implementation. This response, achieved through budgeted, attended programs, developed in response to adopted policies, ultimately brings about realization of the plan.

In previous sections of the Safety and Seismic Safety Element, emphasis has been placed on identifying potential hazards and formulating broad policy commitments for the reduction of risks. Attention must now be directed toward establishing an integrated set of action programs to implement safety policies and achieve the goals set forth.

These program recommendations are the result of an initial effort. The intent of this effort is to identify and evaluate major existing local, county, state and federal resources and then to point out how they deal with the problems identified. In addition, areas of concern which are not currently addressed by existing programs will be directed toward such omissions.

The current level of activity concentrates primarily on local programs. In the future, it is the intention of this element to intensify coordination with other agencies and the general public.

7.1 Identification of Existing Programs

This section contains a listing of programs and activities having significant or potential capability for implementing the Safety and Seismic Safety Element goals and policies.

A. City Programs

- | | |
|-----------------------------|--------------------------|
| 1. Building Regulation | 5. Disaster Preparedness |
| 2. Disaster Response | 6. Emergency Medical Aid |
| Coordination | 7. Grading Regulation |
| 3. Fire Protection | 8. Zoning Regulation |
| 4. Land Division Regulation | |

B. County Programs

- | | |
|-----------------------------|------------------------------|
| 1. Building Regulation | 7. Zoning Regulations |
| 2. Disaster Response | 8. Disaster Preparedness |
| Coordination | 9. Emergency Medical Aid |
| 3. Fire Protection | 10. Geologic Mapping |
| 4. Land Division | 11. Model Neighborhood |
| 5. Taxation | 12. Relocation Services |
| 6. Neighborhood Development | 13. Hazardous Waste Programs |

C. Regional Programs

1. Intergovernmental Coordination (SCAG, AQMD)

D. State Programs

- | | |
|----------------------------------|----------------------|
| 1. Fire/Rescue Emergency Plan | 6. Taxation |
| 2. Water Supply Management | 7. Dam Inundation |
| 3. Dam Safety | Evacuation Areas |
| 4. Geologic Research and Mapping | 8. Fault Hazard Zone |
| 5. School Safety | Mapping |

E. Federal Programs

- | | |
|--------------|---------------------------|
| 1. FIRESCOPE | 3. Relocation Services |
| 2. Taxation | 4. U.S. Geological Survey |

F. Other Implementation Activities and Processes

- | | |
|------------------------|----------------------------|
| 1. Community Relations | 5. Coordination and Review |
| 2. Legislative Actions | 6. Mutual Assistance |
| 3. Long Range Planning | 7. Research and Monitoring |
| 4. Public Education | |

In addition to the programs listed above, selected programs contained in the Safety and Seismic Safety Element contribute to the implementation of the safety policies.

7.2 Seismic Zoning

After a complete evaluation of the dynamic properties of the geologic materials shown on the Generalized Geologic Map, the Surficial Geologic Materials Map, the Liquefaction Susceptibility Map, and the estimated seismic parameters shown on Tables 1 and 2, it was determined that the seismic zoning techniques for the City of Hawaiian Gardens should be generalized and simplified. The basic variables considered are the type of geologic materials, depth to groundwater, and the seismic ground response.

Two seismic zones have been distinguished in this study to classify areas believed to have varying seismic response within the City. They are: 1) possible liquefaction potential; and 2) probable ground shaking only.

7.2.1 Possible Liquefaction Potential

The zone of possible liquefaction is shown on the Liquefaction Susceptibility Map as low (Figure 8). These areas are the least likely to undergo liquefaction during a seismic event, and therefore should not necessarily require geologic-seismic and soils reports for proposed facilities. If investigations are prepared for major facilities, they should demonstrate the geotechnical feasibility of the proposed site and should comment on the potential for liquefaction at the site.

7.2.2 Probable Ground Shaking Only

The City of Hawaiian Gardens is underlain by alluvium and will therefore have a very uniform seismic response within the City. The only expected damage is from shaking and a geologic/seismic and soils report should be required for all critical facilities and multi-story structures which comments on the intensity of shaking.

CITY OF HAWAIIAN GARDENS GENERAL PLAN UPDATE



**AIR QUALITY/
WASTE
ELEMENT**

AIR QUALITY/WASTE ELEMENT

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION TO AIR QUALITY ELEMENT	AQ-1
1.1 Regulatory Framework	AQ-1
1.2 Guiding Principals	AQ-3
2.0 BACKGROUND INFORMATION	AQ-5
2.1 Effects of Air Pollution	AQ-5
2.2 Types of Air Pollutants	AQ-5
2.2.1 Photochemical Smog-Ozone	AQ-6
2.3 Topography and Weather	AQ-6
3.0 AIR QUALITY GOALS, OBJECTIVES AND POLICIES	AQ-7
3.1 Governmental Organization, Roles and Responsibilities	AQ-7
3.2 Ground Transportation	AQ-8
3.3 Land Use	AQ-10
3.4 Particulate Emissions	AQ-11
3.5 Energy Conservation	AQ-11
4.0 AIR QUALITY PROGRAMS	AQ-13
4.1 Transportation Control Measures	AQ-13
4.1.1 Transit Service Enhancements	AQ-13
4.1.2 Employer Trip Reduction	AQ-13
4.1.3 Alternative Work Weeks	AQ-13
4.1.4 Telecommunications	AQ-13
4.1.5 Auto Limitations/Special Event Centers	AQ-14
4.1.6 Shuttle and Delivery Services	AQ-14
4.1.7 Traffic Flow	AQ-14
4.1.8 Bicycle and Pedestrian Improvements	AQ-15
4.1.9 Rideshare Facilities	AQ-15
4.1.10 Parking Supply and Pricing	AQ-15
4.2 Land Use Measures	AQ-15
4.2.1 Mixed Land Uses	AQ-15
4.2.2 Densification	AQ-16
4.2.3 Development Projects	AQ-16
4.2.4 Road/Unpaved Areas Dust	AQ-16

AIR QUALITY/WASTE ELEMENT

TABLE OF CONTENTS (CONTINUED)

	<u>Page</u>
4.3 Other Programs	AQ-16
4.3.1 Public Education	AQ-16
4.3.2 Water Heater Emissions	AQ-17
4.3.3 Recycling	AQ-17
4.3.4 Alternative Fuels	AQ-17
4.3.5 Jobs/Housing Balance	AQ-17
4.4 Innovations and Enhancements	AQ-18
4.5 Coordination and Integration	AQ-18
4.6 Funding	AQ-18
5.0 INTRODUCTION TO WASTE ELEMENT	AQ-19
5.1 Purpose and Intent	AQ-19
5.2 Statutory Requirements	AQ-19
6.0 CURRENT SOLID WASTE MANAGEMENT PRACTICES	AQ-20
6.1 Solid Waste Generation	AQ-20
6.2 Source Reduction	AQ-20
6.3 Recycling	AQ-20
6.4 Composting	AQ-23
6.5 Special Wastes	AQ-23
6.6 Education and Public Information	AQ-24
6.7 Household Hazardous Wastes	AQ-24
7.0 WASTE ELEMENT GOALS AND OBJECTIVES	AQ-25
7.1 Goals	AQ-25
7.2 Objectives	AQ-25
7.2.1 Source Reduction	AQ-25
7.2.2 Recycling	AQ-26
7.2.3 Composting	AQ-26
7.2.4 Special Wastes	AQ-26
7.2.5 Education and Public Information	AQ-26
8.0 WASTE MANAGEMENT PROGRAMS	AQ-27
8.1 Source Reduction Programs	AQ-27
8.2 Recycling Programs	AQ-30
8.3 Composting Programs	AQ-30
8.4 Special Wastes Programs	AQ-30
8.5 Public Information and Educational Programs	AQ-31
8.6 Household Hazardous Wastes Programs	AQ-31
8.7 Solid Waste Facilities	AQ-31

AIR QUALITY/WASTE ELEMENT

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Existing Solid Waste Generation	AQ-21
2. Existing Waste Composition	AQ-22

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Solid Waste Programs	AQ-28

1.0 INTRODUCTION

This Element was derived from a Model Element prepared jointly by 21 jurisdictions in Southeast Los Angeles County during 1992 and early 1993. It is very difficult for cities in the Southeast Los Angeles County (SELAC) area to take effective actions to reduce pollutant emissions. The actions available to local governments do not present particularly palatable choices because many of them are politically controversial and there is growing evidence that many are also not very cost effective. Our businesses are struggling with serious economic problems and can not afford added costs without some visible business benefit. Yet, it is the citizens of our communities who also suffer the substantial direct and indirect, short and long term health costs of our poor air quality. And the Air Quality Management Plan (AQMP) mandates participation by local government in helping to improve air quality.

Faced with this dilemma, the SELAC leaders who helped to shape the Model air quality element believe a statement of principles is essential to help local officials, business leaders and community members establish local air quality goals, policies and actions. The Guiding Principles including herein reflect the sincere attempt by participants in the SELAC air quality planning process, in which the City of Hawaiian Gardens was a participant, to reconcile the unavoidable conflicts central to any program for improving our air quality. This city endorses the Guiding Principles as the foundation for goals, policies and actions it will establish to improve air quality.

1.1 Regulatory Framework

The array of legislative mandates flowing to local governments has expanded significantly in recent years. Requirements for solid and hazardous waste management call for reduction and recycling programs by local governments to remove the pressure from landfills which are near capacity and increasingly difficult to replace. Congestion management to reduce traffic congestion on state highways and principal arterials is now mandated through the Congestion Management Program (CMP), administered by the Los Angeles County Transportation Commission and requiring locally adopted supporting programs. Federal funding programs for transportation improvements now operates largely under the Intermodal Surface Transportation Efficiency Act: federal legislation that de-emphasizes roadway expansion for single occupancy vehicles and shifts priority more heavily than in the past to forms of transit.

These mandates share a common feature: the inclusion of air quality as an essential factor in the program structure called for by the legislation. The severity of pollutant levels and the extent of congestion on the highway system affect the role of air quality as a factor in program content and funding implications. All of this is in addition, but related to, federal and state legislation focused specifically on air quality.

The mandate for governmental and private sector action to reduce pollutants includes, but is not limited to, the following requirements in the California Clean Air Act:

1. Establishment of an indirect source control program, reducing emissions from uses which generate motor vehicle traffic;
2. Reduction of target pollutants by 4 percent per year;
3. Achievement of an average vehicle rideship of 1.5 persons per commuter vehicle by 1999;

4. Limitation of mobile source pollutants to not net increase after 1997, despite continued growth;
5. Substantial reduction in growth of vehicle trips (VT) and vehicle miles traveled (VMT) and
6. Conducting public education programs on air quality.

The Clean Air Act, promulgated in 1970 and amended twice thereafter (including the recent 1990 amendment), establishes the framework for modern air pollution control. The Act directs the Environmental Protection Agency (EPA) to establish ambient air standards for six pollutants: Ozone, Carbon Monoxide, Lead, Nitrogen Dioxide, Particulate Matter and Sulphur Dioxide. The National Air Quality Standards (NAAQS) are divided into primary and secondary standards; the former to protect human health within an adequate margin of safety and the latter to protect environmental values such as plant and animal life.

According to the Act, states are required to submit a State Implementation Plan (SIP) for areas that exceed the NAAQS, or nonattainment areas. The SIP, which is reviewed and approved by the EPA, must demonstrate how the federal standards will be achieved. Failure to submit a plan or secure approval could lead to denial of federal funding and permits for such improvements as highway construction and sewage treatment plants. In cases where the SIP is submitted but fails to demonstrate achievement of the standards, the EPA is directed to prepare a Federal Implementation Plan.

In addition to the six pollutants regulated by federal legislation, the California Clean Air Act establishes standards for Hydrogen Sulphide, Sulphates and Vinyl Chloride. Responsibility for achieving these standards (which are more stringent than federal standards) is placed on the California Air Resources Board and local air pollution control districts. District plans for nonattainment areas must be designed to achieve a five percent annual reduction in emissions. The Air Quality Management Plan (AQMP) is, in turn, incorporated into the SIP.

With the aim of complying with all federal standards by 2007, the South Coast Air Quality Management District (SCAQMD) and Southern California Association of Governments (SCAG) jointly prepared the 1989 Air Quality Management Plan (AQMP). The Plan calls for implementation of rules and regulations by the Air Resources Board, the South Coast Air Quality Management District, the Environmental Protection Agency and local jurisdictions. The 1989 AQMP was revised in 1991 to incorporate the standards of the California Clean Air Act (CCAA). The CCAA became effective on January 1, 1989 and is generally more stringent than the Federal Clean Air Act. The 1991 AQMP Revision was adopted by the Governing Board of the SCAQMD in July 1991.

Local government has the responsibility as an employer, service contractor/provider and regulatory body to help improve air quality. The AQMP calls upon local governments to achieve an eight percent reduction region wide in emissions from reactive organic gases and oxides of nitrogen. Specifically, local governments are required to implement appropriate control measures contained in the AQMP to achieve this reduction. Several measures direct local government to adopt an air quality element or its equivalent into the General Plan. If all of the applicable control measures are not implemented, the air quality standards cannot be achieved. In this event, the existing moratorium on location of stationary sources in the basin will be continued and federal funding and other permits may be denied until the standards are met.

Most of the local government control measures are classified as transportation demand management or trip reduction strategies which local governments are to adopt by December 31, 1993. The approach is to establish vehicle trip performance targets for each jurisdiction. These targets, when met, are intended to accomplish the same emission reductions benefits as those achievable by adopting the individual control measures. Local governments now have the option of selecting Actions from a menu to achieve the performance target. Local governments would also have the option of selecting Actions not on the menu, provided that such actions meet the tests of being quantifiable, enforceable, and measurable.

1.2 Guiding Principals

The following principles express the basic orientation from which goals and policies are formulated. To the maximum extent possible, goals and policies are focused on topical areas of action and do not attempt to repeat the principles. Rather, they reinforce the principles. Interpretations of intent and extent of implementation of air quality goals and policies are subject to the application of these principles.

1.2.1 City Capabilities

All measures and actions requiring local government effort are understood to be limited to the extent that fiscal conditions and resources are available to the city.

1.2.2 Mobility

Actions to reduce emissions must be balanced with continued mobility.

1.2.3 Economic Vitality

Actions to reduce emissions must be balanced with continued economic vitality of SELAC cities.

1.2.4 Cost Effectiveness

The combination of actions taken to reduce emissions should be cost effective.

1.2.5 Incentives and Regulations

Emphasis should be placed on incentives over regulation.

1.2.6 Basic Costs

It is understood that all resources, whether public or private, cost someone something: nothing is free.

1.2.7 Emission Reduction Strategy

Actions will be aimed at ways to reduce mobile emissions: reduce the number of vehicle trips (VT) made and the number of vehicle miles traveled (VMT).

1.2.8 Local Government Leadership

To the extent permitted by fiscal and other limitations, local government is expected to set an example for the business community in implementing air quality improvement strategies.

1.2.9 Coordinated Commitment

Policy and action taken in a coordinated way by SELAC cities will be more effective than totally independent commitments.

1.2.10 Cooperative Action

Combinations of cities within the SELAC area can be effective if selected actions are taken jointly.

1.2.11 Education

Public education is critical to the successful adoption and implementation of actions to improve air quality.

1.2.12 Consistency

The business community will find it easier and less costly to comply with air quality requirements if they are consistent from city to city within SELAC.

1.2.13 Continuity

Sustaining the cooperative air quality approach in SELAC beyond completion of the air quality element will contribute to implementation effectiveness.

2.0 BACKGROUND INFORMATION

2.1 Effects of Air Pollution

Both the State of California and the Federal Government have established health based standards for six air pollutants. These pollutants include carbon monoxide, nitrogen dioxide, sulfur dioxide, ozone, lead and fine particulate matter (PM10). The most critical pollutants in terms of health effects are described below:

Carbon Monoxide (CO) Carbon monoxide is an odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. CO passes through the lungs into the blood stream where it interferes with the transfer of oxygen to body tissues.

Ozone Ozone is a pungent, colorless gas that is typical in southern California smog. The major effects of "oxidants" are visibility reduction, vegetation damage, aggravation of respiratory diseases and eye irritation. Peak ozone concentrations result in reduced lung function, particularly during physical activity. This effect is acute in the sick, elderly and young children. Ozone levels peak during the summer and early fall months.

Particulate Matter Particulate matter (PM10) is small suspended particulate matter. Particulate matter may carry carcinogens and other toxic compounds. Human lungs are unable to filter this matter because of its small size. PM10 can be carried to other organs once it enters the body through the lungs.

Nitrogen Oxides (NOx) Nitrogen oxide is an irritating gas that may increase the susceptibility of individuals to infection and may construct the airways of asthmatics.

2.2 Types of Air Pollutants

Pollutants are usually divided into two classes: particulate matter (either solid or liquid); and the various pollutant gases. Both classes affect citizens in Southeast Los Angeles County. Smoke, composed of carbon and other products of incomplete combustion, is the most obvious form of particulate pollution. Earth moving operations, especially construction and farming, and industrial processes that involve grinding or pulverizing materials, generate significant amounts of dust. In addition, liquid aerosols and solid particles form photochemically in the atmosphere when sunlight reacts with waste gases. Natural and synthetic formation of particulate matter is a factor in Southeast Los Angeles County's emissions patterns. As noted above, small particles less than 10 microns in size are the subject of state and federal air quality standards.

The most significant gas affecting Southeast Los Angeles County's air quality is carbon monoxide (CO). This gas is a primary pollutant in that it can directly be damaging. About 70 percent of Southeast Los Angeles County's carbon monoxide comes from the incomplete combustion of gasoline by motor vehicles. State and federal controls on new cars are designed to limit carbon monoxide.

Reactive Organic Gases (ROG) is a by-product of incomplete combustion of fuel and organic waste material. ROG is also emitted to the atmosphere when paints, inks, solvents and gasoline evaporate. Rules regulating reformulation of gasoline in order to reduce emissions of reactive gases will be implemented by the California Air Resources Board (CARB) through the year 2000. Like CO, ROG is also a precursor to the formation of ozone, or smog.

2.2.1 Photochemical Smog-Ozone

Ozone--or photochemical smog--is a relatively new kind of air pollution. It results from a chemical reaction which takes place in the atmosphere between nitrogen dioxide and reactive organic gases under the influence of sunshine. Various factors affect this process, including the quantity of gases present, the volume of air available for dilution, the temperature and the amount of sunshine. Ideal conditions occur in the fall on warm, windless, sunny days, and this is when we most frequently experience smog conditions. The largest fraction of photochemical smog is ozone (O₃).

The greatest source of the gases that trigger photochemical smog is the automobile. In the South Coast Air Basin (SoCAB), about 58 percent of the nitrogen oxides come from cars and trucks. The State's automobile control program has already succeeded in making a substantial reduction, with more progress expected through the decade.

2.3 Topography and Weather

Southeast Los Angeles County is located in the SoCAB which includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside counties. The unique topographic and climatic conditions in the basin impact air quality. The basin is surrounded by the San Gabriel, San Bernardino, San Gorgonio and San Jacinto mountains. The topography results in the potential for trapping and accumulation of air pollutants in the air basin.

While contaminants are emitted at a fairly constant rate throughout the year, pollution concentrations fluctuate depending on weather.

The amount of air available to dilute pollutants depends primarily on two factors: the horizontal airflow and the vertical mixing. Vertical mixing is severely limited by temperature inversions. The important effect of a temperature inversion is to prevent pollutants from rising and being diluted vertically. Thus inversions trap pollutants in the lower layer of air where people breathe.

Normally the atmosphere's temperature decreases with altitude. During an inversion, warmer air lies above a layer of cooler air. The strong inversions typical of our summers are caused by downward vertical motion, called subsidence, which compresses and heats the air. The surface inversions typical of winter are formed by radiation as air is cooled in contact with the earth's cold surface at night. Both types of inversion mechanism may operate at any time of the year, and in the fall both may combine to produce our heaviest pollution.

The other major factor influencing pollutant dispersion is horizontal airflow, which is measured by wind speed. Wind direction is a major factor in alleviating air pollutant concentrations. Wind direction reversals can cause pollutants to drift back and forth beneath the inversion as winds shift.

The inversion and wind speed together determine the ventilation factor, which refers to the total volume of air available to dilute our contaminants. In Southeast Los Angeles County ventilation is normally adequate to disperse most of our pollution. However, poor ventilation during the warm, sunny months fosters the development of photochemical ozone, resulting in a "smog season" between May and October. Other contaminants such as carbon monoxide and particulates reach their highest levels in late fall and winter, but the very shallow inversions that cause their build-up do not persist.

3.0 AIR QUALITY GOALS, OBJECTIVES AND POLICIES

The goals and policies of the Air Quality Element are grouped into five topical areas:

1. Governmental Organization, Roles and Responsibilities;
2. Ground Transportation;
3. Land Use;
4. Particulate Emissions; and,
5. Energy Conservation.

A general goal statement for each topic expresses the general, long range condition toward which effort is being directed. Each goal is reinforced by a series of policies which provide guidance for decision making that will advance the goal. Implementing actions in the local air quality implementation program are the most prominent result of establishing policy.

3.1 Governmental Organization, Roles and Responsibilities

GOAL 1

Effective coordination of air quality improvement efforts in Southeast Los Angeles County and the region.

Objective 1.1

Federal and State legislation requires a plan for achieving air quality targets in this air basin. That plan establishes local government requirements for reducing pollutants. Air pollutants do not recognize political boundaries. The policies of each community may adversely affect others. That is why strategies to improve air quality must be coordinated among governments: federal, state, regional and local. In responding to these mandates, local governments feel it is essential to apply the most cost effective methods of reducing pollutants, balancing air quality, economic vitality and mobility. The success of air quality efforts depends on support from local government, the business community and the general public.

Policies

- 1.1.1 Coordinate with other jurisdictions in Southeast Los Angeles County in a continuation of the consortium to establish compatible air quality plans and implementation programs where practical.
- 1.1.2 Explore the feasibility of a consortium process to integrate the development, implementation, monitoring, verification of cost effectiveness, and reporting of related programs.
- 1.1.3 Encourage the involvement of environmental groups, community organizations, businesses, business organizations, labor groups, and the general public in the formulation and implementation of air quality improvement programs.

- 1.1.4 Develop public education programs explaining the air quality problem, within the fiscal capabilities of individual cities, which highlight economic and health implications of poor air quality and demonstrate what individuals need to do to improve air quality.
- 1.1.5 Advocate and support new or accelerated approaches to improve air quality, including market-based strategies and other direct measures where appropriate and feasible.
- 1.1.6 Promote State and Federal legislation which would provide adequate sources of funding for air quality planning, coordination, implementation, and public educational programs.

3.2 Ground Transportation

GOAL 2

A diverse and efficient ground transportation system that minimizes air pollutant emissions.

Objective 2.1

Air pollutants in the South Coast Air Basin are generated by stationary and mobile sources. Among mobile sources, vehicles and mobile equipment powered by the internal combustion engine contribute more pollutants than any other single source. Among these, the mode of travel that offers the greatest potential for pollutant reduction is the single occupant automobile. Because of this emphasis, the intent of the Ground Transportation Goal is to reduce the number of vehicle trips, reduce the vehicle miles travelled to improve traffic flow efficiency, and convert to alternative fuels wherever possible. This can best be done by modes of travel other than the single occupant automobile, beginning with those which are practical now and leading to more effective modes as soon as they become practicable.

Policies

- 2.1.1 Participate with and influence the county transportation commissions and applicable local governments to expeditiously expand bus, rail and other forms of transit along major transportation corridors in Southeast Los Angeles County which provide connections between residential areas, regional employment and commercial centers, special activity centers such as airports, public/quasi public centers such as health care facilities, and major recreation areas.
- 2.1.2 Establish programs and incentives for governmental and business employers to implement trip reduction programs for employees where fiscal and economic impacts are acceptable.
- 2.1.3 Establish programs and incentives for governmental and business employers to implement alternative work schedules for employees where fiscal, economic and operational impacts are acceptable.
- 2.1.4 Establish programs and incentives for governmental and business employers to implement telecommunications/teleconferencing systems where operational impacts are acceptable.

-
- 2.1.5 Establish limitations on direct automobile access to special event centers where alternative modes of access exist or can be cost effectively provided.
 - 2.1.6 Establish programs and incentives for provision of shuttle and delivery services where market demand and cost effectiveness can be demonstrated.
 - 2.1.7 Participate in cooperative programs, and comply with the Congestion Management Program (CMP), for the orderly flow of traffic to maintain or improve mobility.
 - 2.1.8 Provide alternatives to motorized transportation in cooperation with other jurisdictions and special districts by establishing a convenient and efficient system of bicycle routes and pedestrian walkways within the community, and trail linkages between communities whenever feasible.
 - 2.1.9 Establish incentives and requirements in land use regulations to improve the design of facilities to encourage ridesharing and non-motorized transit instead of single-occupant vehicle use, while ensuring that economic development goals and congestion management are not sacrificed and vehicles are not diverted to adjacent residential areas.
 - 2.1.10 Establish incentives and regulations which allow for a reduction in required parking where alternative modes of access exist or can be readily provided and where a parking deficiency does not already exist.
 - 2.1.11 Participate with other jurisdictions in developing a basin-wide or subregional approach to relating parking costs to availability of alternative transportation modes in order to increase vehicle occupancy while not placing any single jurisdiction at a competitive disadvantage.
 - 2.1.12 Participate with other local governments in seeking state and federal legislation which would continue to expand sources of funding for Transportation Demand Management strategies and comprehensive transportation system improvements.
 - 2.1.13 Seek legislation to provide financial incentives for fleet conversion for public and private automobiles to alternate fuels, and where fiscal benefits can also be demonstrated, invest in clean fuel systems for new local government fleet vehicles.
 - 2.1.14 Participate with other local governments in seeking state and federal legislation that would improve transportation technology and would establish a direct link between the true cost of emissions and the sources of air pollution.
 - 2.1.15 Develop and promote public education programs within the fiscal capabilities of individual cities concerning air pollution from automobiles and other mobile sources of pollutants and the opportunities available for transit or non-motorized transportation.

- 2.1.16 Participate with the Air Quality Management District in the development of a regional rule involving truck operating schedules and possible route restrictions to relieve congestion on major arterials, including specific consideration of type, size, cost, location and security needs of the businesses, as well as impacts of local noise policies and ordinances.

3.3 Land Use

GOAL 3

A pattern of land uses which can be efficiently served by a diversified transportation system and which directly and indirectly minimizes air pollutants.

Objective 3.1

The amount, location, type, and design of land uses in the community have long-term air quality implications. Over time, the intent is to achieve a pattern of land uses that facilitates a reduction in mobile emissions through the availability of alternate transportation modes. This can make important contributions to improving and maintaining air quality. New development has the opportunity to incorporate project design features which contribute toward the reduction of VT and VMT. Retrofitting and revitalization of existing development can be accompanied by techniques to directly and indirectly reduce emissions. By conditioning projects to address air quality measures along with other public health and welfare concerns, a jurisdiction can make progress towards achieving pollution reduction targets at reasonable economic costs. The intent of this section of the element is to achieve as much of a balance between land use and the total transportation system serving the city as possible, given the limitations imposed by being almost totally developed. Furthermore, the intent is to encourage and facilitate a closer home to work relationship.

Policies

- 3.1.1 Where an imbalance exists or is projected, seek new development that provides employment opportunities for residents of the community in order to improve the balance of jobs relative to housing.
- 3.1.2 Provide incentives for establishing a complementary mix of uses within projects to reduce the number of and length of trips and promote a shift from auto use to transit, pedestrian and bicycle modes of travel.
- 3.1.3 Increase residential densities and commercial intensities close to transit stations to the maximum extent possible, given other impacts of intensification, to improve the effectiveness and usage of transit and other non-automotive forms of transportation.
- 3.1.4 Encourage in-fill development near activity centers and along transportation corridors to increase participation in alternative modes of travel to the single occupancy vehicle.
- 3.1.5 Collaborate with the SCAQMD and other local governments to mitigate the potential health impacts on sensitive receptors (schools, hospitals, residential areas) from surrounding sources of toxic air contaminants, and to ensure that toxic emissions do not exceed air quality standards.

- 3.1.6 When making land use decisions, consideration should be given to minimizing conflicts between emission sources and sensitive receptors.
- 3.1.7 Develop public education information which explains the benefits of efficient land use patterns and compact development.
- 3.1.8 Participate with other local governments in seeking state and federal legislation which would expand sources of consistent funding for coordinated planning programs that address efficient land use patterns and compact development.

3.4 Particulate Emissions

GOAL 4

Minimize particulate emissions from the construction and operation of roads and buildings.

Objective 4.1

Sources of fugitive dust emissions including unpaved roads, accumulated debris on paved roads, and dirt lots are susceptible to wind erosion which creates visibility and air quality degradation. The intent is to reduce particulate emissions through regulations and enforcement measures to the greatest extent possible.

Policies

- 4.1.1 Minimize particulate emissions from roads, parking lots, construction sites, and vacant lots, taking into consideration public and private costs.
- 4.1.2 Encourage construction and renovation methods that minimize emissions from building materials and the construction process.
- 4.1.3 Develop public education programs concerning the nature and effects of particulate emissions and what individuals, businesses and cities should do to minimize particulate emissions.

3.5 Energy Conservation

GOAL 5

Emissions reductions through decreased energy consumption.

Objective 5.1

Energy generation results in the emission of air pollutants. Through energy conservation, the demand for energy generation is reduced, thereby decreasing the emission of pollutants. The California Energy Commission, public utilities commission and local utilities are continuing to develop and implement numerous programs to reduce energy consumption including: Rebate programs for retrofitting, public education campaigns, revisions to building standards, and others programs. The intent of this goal is not to duplicate these efforts, but to enhance them where feasible and appropriate. Recycling efforts also reduce emissions as the amount of energy required for production of goods and materials is decreased over time.

Policies

- 5.1.1 Support cost-effective, energy efficient emissions reduction improvements to existing development and promote cost effective energy efficiency requirements for new projects.
- 5.1.2 Support state and federal legislation requiring a reduction in emissions resulting from swimming pool heaters and residential and commercial water heaters, including incentives and cost offsets to stimulate equipment replacement or retrofit.
- 5.1.3 Encourage participation by other jurisdictions and private industry in locating or developing markets for recycled products to facilitate implementation of the City's Source Reduction and Recycling Element to conserve energy resources and achieve a corresponding reduction in air pollution.
- 5.1.4 Develop the air quality public education programs to include the benefits of energy conservation.
- 5.1.5 Participate with other local governments in seeking state and federal legislation which would expand sources of funding for energy conservation technology and programs.

4.0 AIR QUALITY PROGRAMS

4.1 Transportation Control Measures

4.1.1 Transit Service Enhancements

- a. Participate with MTA in a cooperative program to increase transit services with existing equipment, and expand services through transit facility improvements.
- b. Coordinate with MTA to increase funding for transit improvements to supplement other means of travel.
- c. Require new development to incorporate design features which facilitate transit service and encourage transit ridership such as bus pull-out areas, covered bus stop facilities, efficient trail systems through projects to transit stops, designation of special on-site parking spaces beyond case requirements for commuter park-n-ride purposes, and incorporation of pedestrian walkways that pass through subdivision boundary walls.
- d. Support efforts to establish a region-wide bus transit pass.

4.1.2 Employer Trip Reduction

- a. Require TMA/TMO establishment for large employers and commercial/industrial complexes. Apply to new businesses at project approval or permit stage.
- b. Require employee rideshare and transit incentives for employers with more than 25 employees at a single location. Apply to existing businesses at license renewal time; to new businesses at project approval or permit stage.

4.1.3 Alternative Work Weeks

- a. Implement staggered, flexible and compressed work schedules in public agencies.
- b. Require work schedule flexibility programs for private sector employers with less than 100 employees at a single location. Apply to existing businesses at license renewal time; to new businesses at project approval or permit stage.

4.1.4 Telecommunications

- a. Implement home-based telecommuting programs in public agencies.
- b. Participate with MTA to develop a private/public telecommunication center in Southeast Los Angeles.
- c. Encourage a video conferencing facility in new office park developments.
- d. Require teleconferencing and telecommuting for private employers with more than 25 employees at a single location. Apply to existing businesses at license renewal times; to new businesses at project approval or permit stage.

4.1.5 Auto Limitations/Special Event Centers

- a. Require centers to provide off-site parking lots for visitors, with shuttle service to the site.
- b. Require operators of major outdoor events to submit Trip Reduction Plans (TRP) which shall apply to both patrons and employees during the course of the event.

4.1.6 Shuttle and Delivery Services

- a. Participate in cooperative efforts to establish legislation affording incentives for purchase of vanpools.
- b. Encourage existing or new office parks or business centers to provide shuttles to and from transit facilities.
- c. Encourage existing or new employers to contribute to a lunch-time or all day shuttle service that provides access to activity centers.
- d. Encourage new housing subdivisions to include a shuttle that accesses major work centers and transit facilities.
- e. Encourage new commercial retail and service centers to provide delivery services to residents and office complexes in the vicinity.

4.1.7 Traffic Flow

- a. Limit the provision of on-street (curbside) parking along principal arterial roadways to increase the traffic carrying capacity of the roadway.
- b. Identify and prioritize system improvements needed to increase mobility, such as signal synchronization and reverse flow traffic lanes, and establish a program for the orderly implementation of such improvements.
- c. Require circulation improvements prior to, or concurrent with development.
- d. Participate with the Air Quality Management District in the development of a regional rule involving truck operating schedules and possible route restrictions to relieve congestion on major arterials.
- e. Remove illegally parked and stalled cars and accidents from roadways to immediately minimize blockage.
- f. Encourage railroads to minimize road blockages during peak period travel times.

4.1.8 Bicycle and Pedestrian Improvements

- a. Require specific plans and other mixed-use projects to provide an internal system of trails linking schools, shopping centers, transit and other public facilities with residential areas.
- b. Require bicycle parking facilities as a percentage of auto parking spaces or as a ratio to square feet in new non-residential development and require secured lockers.
- c. Require shower facilities in new non-residential development with more than 50 employees for persons bicycling or walking to works.
- d. Require pedestrian walkways and bicycle lanes to connect each building in new non-residential development with the local system of pedestrian/bicycle paths.
- e. Contribute to a bicycle route system, either by contributions from new development or provision of bikeway segments, that is consistent with SCAG's Regional Mobility Element.

4.1.9 Rideshare Facilities

- a. Require a percentage or number of employee parking spaces to be reserved for rideshare vehicles and located in preferential locations.
- b. Require passenger loading areas for ridesharing based on the number of ridesharing spaces provided in non-residential development. Require loading areas to be located close to the building's entrance and designed to not interfere with vehicular circulation.
- c. Require that parking facilities provide parking for vanpools and be designed with a vertical clearance of 7'-2" minimum.

4.1.10 Parking Supply and Pricing

- a. Reduce the supply of parking for employees where trip reduction plans are in operation and demonstrate use of ridesharing and other transportation modes.
- b. Encourage the joint use of parking facilities to maximize the existing parking supply and reduce the ultimate supply of parking available for single-occupancy travel.
- c. Encourage public and privately-operated paid parking lots to offer discounts for carpools and vanpools.
- d. Encourage single-occupant surcharges, reduced employee subsidized parking, and increased parking enforcement.

4.2 Land Use Measures

4.2.1 Mixed Land Uses

- a. Cluster residential and commercial uses to provide a complementary mix of activities; and require a human scale or proportion between building height and the width of the right-of-way and building setbacks.

- b. Require new residential subdivisions over five acres to include supportive commercial uses, including banks and retail uses and services, that are conveniently accessible to pedestrians and bicyclists.
- c. Provide density bonuses for new mixed use development based on the amount of floor area devoted to uses which contribute to reduced trip making, such as child care facilities and senior citizen uses.

4.2.2 Densification

- a. Incorporate strategies into design guidelines and development standards which promote a pedestrian scale environment, encourage the use of transit, and reduce dependency on the automobile.
- b. Implement programs designed to attract infill development within targeted areas of the community through incentives such as: loan programs, small business development programs, joint public/private partnerships, and rehabilitation demonstration projects.

4.2.3 Development Projects

- a. Adopt incentives, regulations and procedures to prohibit the use of building materials and methods which generate excessive pollutants.
- b. Implement plans and programs to phase in energy conservation improvements, equipment and facilities.
- c. Adopt incentives and regulations to encourage energy conservation for private development, including the use of site planning techniques, landscaping, building orientation, and building design.

4.2.4 Road/Unpaved Areas Dust

- a. Manage paved roads to produce the minimum practicable level of particulates.
- b. Minimize particulate emissions during road, parking lot and building construction phase.
- c. Control particulate emissions from unpaved roads, vehicle maneuvering areas and parking lots.
- d. Limit dust from agricultural lands and operations (where applicable).

4.3 Other Programs

4.3.1 Public Education

- a. Require non-residential development of 25,000 square feet or more to provide a bulletin board, display case or kiosk displaying transportation information.
- b. Coordinate with the Southeast Los Angeles County (SELAC) Air Quality Consortium to establish public education programs that increase the public's awareness and support for air quality improvement programs.

- c. Coordinate with Southeast Los Angeles County (SELAC) Air Quality Consortium to establish public education programs that increase the public's awareness about pollution from automobiles, and distribute user-friendly information on transit schedules/routes and bicycle and pedestrian paths.
- d. Coordinate with Southeast Los Angeles County (SELAC) Air Quality Consortium to establish public education programs that increase the public's awareness about the sources of air pollution through newsletters, pamphlets, and presentations to various community organizations.
- e. Coordinate with Southeast Los Angeles County (SELAC) Air Quality Consortium and utility districts to establish public education programs that increase the public's knowledge about residential energy conservation techniques and the benefits to air quality. Public relation methods to include newsletters, pamphlets and presentations to community groups.
- f. Require employers of less than 100 persons to provide a centrally located commuter information area that offers information on available transportation alternatives, route schedules and maps, available employee incentives, and rideshare promotional equipment.

4.3.2 Water Heater Emissions

- a. Support State and Federal incentives and regulations to reduce emissions from swimming pool heaters and residential/commercial water heating.

4.3.3 Recycling

- a. Promote local recycling, solid waste reduction and other source reduction strategies established in the California Integrated Waste Management Act of 1989.

4.3.4 Alternative Fuels

- a. Purchase clean fuel systems on new local government fleet vehicles.
- b. Support legislation to stimulate the development of practical electric vehicles.

4.3.5 Jobs/Housing Balance

- a. Revise the project review process and land use administration procedure to ensure that individual projects have a positive or neutral impact on jobs/workers ratios; and provide for expedited processing of projects which improve jobs/workers ratios.
- b. Offer financial subsidies or assistance to attract new businesses or stimulate expansion of existing business by using incentive oriented tax credits; low interest revolving loan programs; small business development programs; tax exempt bond financing; city financed infrastructure improvements and/or land for job creating uses; and tax exempt bond financing.
- c. Establish cooperative programs to improve the business climate and competitive edge of cities within the SELAC area, as well as improving jobs/workers balance by considering cooperative economic development programs and cooperative agreements to improve areawide jobs/workers balance through mutually acceptable efforts.

4.4 Innovations and Enhancements

- a. Participate in a regional effort to implement congestion pricing on highways or other roadways.
- b. Support the accelerated use of reformulated or cleaner-burning gasoline.
- c. Support County, regional, and State efforts to increase emissions inspections of motor vehicles and the required maintenance to bring emissions up to standards.
- d. Support investigation of the feasibility of Highway Electrification and Automation.
- e. Support legislation that requires pollution control equipment on construction vehicles.
- f. Support legislation that expedites the ability of phone companies to create the infrastructure required for teleconferencing facilities.
- g. Support legislation that provides tax credits for investments in home computers to enable employees to work at home.
- h. Support legislation that provides tax credits and other incentives for setting-aside land or providing facilities for telecommunication centers.

4.5 Coordination and Integration

- a. Establish an ongoing air quality implementation program, adapting it as necessary to local circumstances, resources and procedures.
- b. Establish a coordination process for relating parallel and implementive actions undertaken as part of other regional or countywide efforts.
- c. Participate with MTA in defining and implementing a Congestion Management Program for Los Angeles County.

4.6 Funding

- a. Identify existing sources of State and Federal funds for air quality planning and public education, including the federal funds associated with the Intermodal Surface Transportation Efficiency Act (ISTEA).
- b. Identify and remove barriers to the use of State and Federal funds for air quality improvement purposes.
- c. Seek to increase the overall funding availability for local emissions reduction programs.
- d. Seek to insure 100 percent funding of State and Federal air quality program mandates.

5.0 INTRODUCTION TO WASTE ELEMENT

5.1 Purpose and Intent

The City of Hawaiian Gardens Waste Element incorporates the goals, objectives and programs included in the City's Source Reduction and Recycling Element (SRRE) and Household Hazardous Waste Element (HHWE). These Elements were developed in response to Assembly Bill 939, the California Integrated Waste Management Act of 1989 (AB 939). AB 939 requires every city and county in the State of California to prepare an SRRE that identifies how each jurisdiction will meet the mandatory waste diversion goals set by the State of 25% by 1995 and 50% by 2000. The law also requires every jurisdiction to develop an HHWE to plan for the proper management of hazardous wastes that are generated by households.

It is the intent, through the incorporation of the SRRE and HHWE, to integrate the mandated goals and implementation programs of AB 939 with the City's General Plan, and to achieve consistency with the other elements of the General Plan, particularly the Conservation and Land Use Elements.

5.2 Statutory Requirements

The SRRE from which this Waste Element was derived, was prepared to be consistent with Public Resources Code Section 40000 et seq., and the regulations developed by the California Integrated Waste Management Board (CIWMB) entitled "Planning Guidelines and Procedures for Preparing and Revising Countywide Integrated Waste Management Plans." These regulations are found in Title 14 of the California Code of Regulations (CCR), Chapter 9.

6.0 CURRENT SOLID WASTE MANAGEMENT PRACTICES

6.1 Solid Waste Generation

A solid waste generation study was conducted to quantify and characterize the solid waste generated, diverted, and disposed by the City of Hawaiian Gardens. Results of the solid waste generation study are summarized in Figure 1. Currently, 12,716 tons of solid waste are generated in the City annually. Through a number of existing diversion programs operated by the private sector, 936 tons annually are diverted from disposal at nearby landfills. This existing level of solid waste diversion equals approximately 7.4% of the current solid waste generation.

The waste stream composition is presented in Figure 2. This is the combined waste stream composition from the residential, commercial, and industrial sectors.

Solid waste generated within the City is collected by one commercial/residential hauler who is licensed in the City, Cesena Disposal Company. This firm has an exclusive franchise with the City of Hawaiian Gardens until 1997. Waste collected within the City goes to either Puente Hills Landfill, Spadra Landfill or the Bel-Art Transfer Station in Long Beach. Currently, the City is not sponsoring any specific diversion activities. However, there are several recycling drop-off centers and reverse vending machine locations at the local shopping centers.

6.2 Source Reduction

Source reduction means producing less waste, and is the first priority in the integrated waste management system hierarchy. Programs for source reduction are the most difficult to implement, and the most difficult to quantify, in terms of contribution to diversion.

The following source reduction activities are currently taking place in the City:

1. Municipal tree trimmings collected by a private hauler;
2. Use of cloth diapers instead of disposable diapers by some residents;
3. Backyard composting by some residents;
4. Repair and reuse of appliances and other bulky items by some generators; and
5. Donation of some household items to charities and other organizations by some generators.

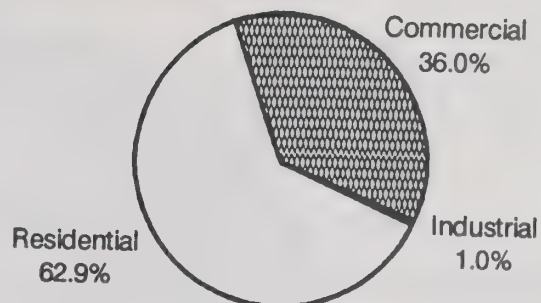
Total diversion as a result of identified source reduction activities is 152 tons per year, or 1.2% of the current waste generation rate in the City.

6.3 Recycling

Recycling activities within the City include buy-back centers, business recycling, material salvage by haulers, and routine cardboard recycling by grocery stores and other major businesses. Based on the Solid Waste Generation Study (SWGS), a large portion of the existing diversion activities taking place in the City is credited to recycling.

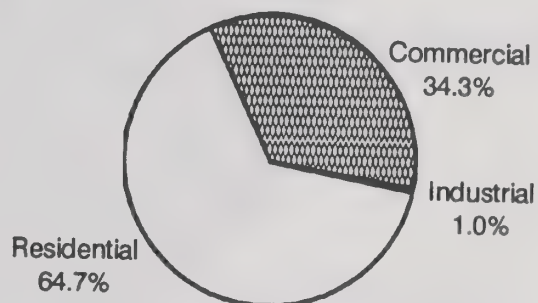
Solid Waste Generation (tons/year) ⁽¹⁾

Residential	8,000
Commercial	4,583
Industrial	<u>133</u>
Total	12,716



Solid Waste Disposal (tons/year)

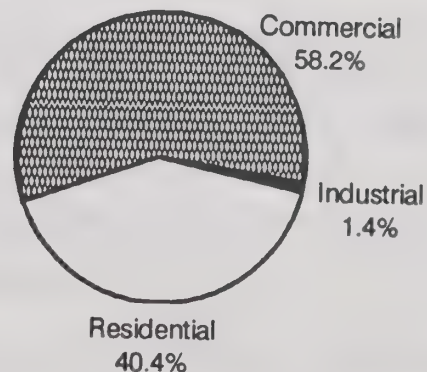
Residential	7,622
Commercial	4,038
Industrial	<u>120</u>
Total	11,780



Solid Waste Diversion (tons/year)

Current diversion rate = 7.4%

Residential	378
Commercial	545
Industrial	<u>13</u>
Total	936



CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

**EXISTING SOLID WASTE
GENERATION**

AIR QUALITY/WASTE ELEMENT

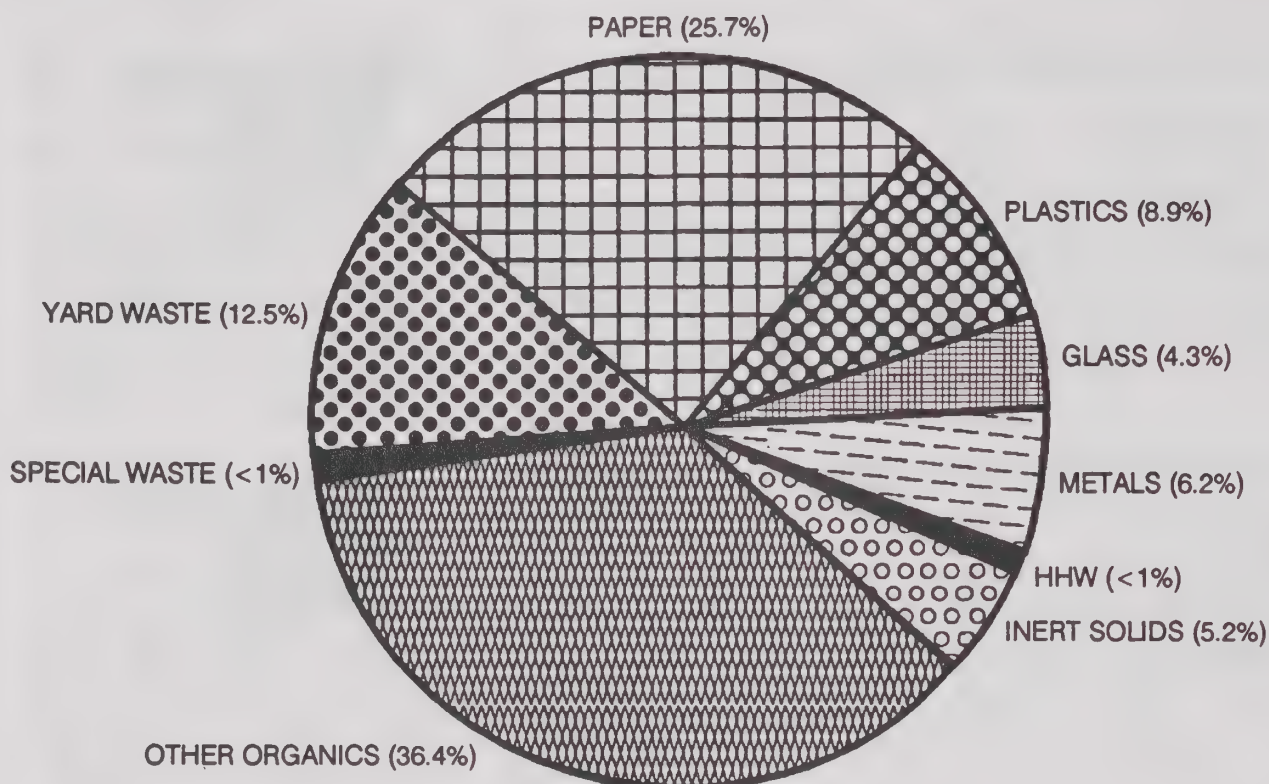
LOCKMAN &
ASSOCIATES

1

FIGURE

Source: Emcon Associates, 1991

⁽¹⁾ Generation = Disposal and Diversion



PAPER: newspaper, corrugated containers, brown paper bags, high grade ledger, mixed paper, other paper

PLASTICS: high-density polyethylene (HDPE) containers, polyethylene terephthalate (PET) containers, film plastics, other plastics

GLASS: California redemption value glass, other recyclable glass, other non-recyclable glass

METALS: aluminum cans, bi-metal containers, ferrous metals and tin cans, non-ferrous metals, white goods, other metals

INERT SOLIDS: rocks, concrete, brick, sand, soil fines, asphalt, sheet rock

HOUSEHOLD HAZARDOUS WASTES (HHW): household hazardous waste materials and discarded household hazardous waste material containers

YARD WASTE: grass, leaves, prunings

OTHER ORGANICS: food waste, wood waste, tires and rubber, manure, textiles and leather, disposable diapers, other miscellaneous organics

SPECIAL WASTES: ash, industrial sludge, sewage sludge, asbestos, auto shredder, auto bodies, other special wastes

CITY OF
HAWAIIAN GARDENS

GENERAL PLAN UPDATE - 1992

WASTE STREAM COMPOSITION

AIR QUALITY/WASTE ELEMENT

LOCKMAN &
ASSOCIATES

2

FIGURE

Source: Emcon Associates, 1991

The materials being recovered in the City are newspaper, OCC, California Redemption Value (CRV) glass, tires, food waste, and ferrous metals. The SWGS presents a detailed listing of the quantities of all materials being diverted. It is noted that tires are considered special wastes and are covered in the Special Waste discussion section.

The following describes the various recycling activities within Hawaiian Gardens:

1. Recovery of assorted materials through citizen-return to certified California Redemption Centers, located both within and outside the City;
2. Recovery of assorted materials through commercial recyclers;
3. Recovery of Old Corrugated Cardboard (OCC) by grocery stores and other major retailers;
4. Recovery of tires through recapping and resale; and
5. Recovery of paper (through paper brokers) from schools.

The SWGS conducted for the City shows recycling activities divert approximately 4.5% of the total waste generated in the City, which equates to about 572 tons.

6.4 Composting

Composting can play a key role in the City's integrated waste management system. Yard waste and readily decomposable material make up a significant portion of the total waste stream. In 1990, yard waste in Hawaiian Gardens contributed 1,727 tons or 13.6% of the total waste generated.

Presently, there are no significant existing municipal solid waste (MSW) composting operations within the City, and no significant quantities of organics, within the MSW generated locally, are being diverted to other regional programs.

There is an existing private yard waste processing facility owned and operated by United Pacific Corporation (UPC) which is located in Santa Fe Springs. The capacity of the facility is estimated at over 1,500 tons per day (450,000 tons per year), and has a peak capacity of 3,000 tons per day on an intermittent basis. Incoming yard waste is screened to remove contaminants, size reduced, and then transported to the company's composting facility near Bakersfield. Compost products are then back-hauled to Los Angeles. UPC is currently evaluating plans to open additional yard waste receiving and processing centers throughout the Los Angeles Basin that would increase their total processing capacity to well over 1,000,000 tons per year. Their facilities are regulated by the State of California, and UPC has received all necessary permits.

6.5 Special Wastes

Special wastes include difficult to handle materials such as tires, construction debris, white goods, sofas, and mattresses; and potentially hazardous wastes such as sewage sludge, asbestos, auto bodies, or ash. The special wastes addressed in this component include bulky items such as white goods and tires, and inert solids such as demolition and construction debris.

Presently, there are no City-sponsored programs that address the diversion of special wastes. However, as identified in the solid waste generation study, bulky items such as tires and white goods are currently being diverted from disposal by the private sector through tire recycling and appliance repair, respectively. The total quantity of these special wastes currently being diverted is 85 tons per year: 65 tons of tires and rubber, and 20 tons of white goods. This amount is equivalent to 0.7% of the existing generation rate.

Tires are currently regulated by the state under AB 1843 (Public Resources Code 42800, et seq.) which requires the State to achieve a 25% reduction in landfilled tires within 4 years of implementation of a State-wide recycling program. The law establishes registration and permitting requirements, and a fee structure for used tire management. It also establishes grant and loan programs for the recyclers, and a State procurement policy for recycled tire products. A fee of \$0.25 per tire is collected by new and used tire dealers and remitted to the CIWMB for management of the State-wide program.

Construction and demolition waste is addressed in legislation (AB 1306) that focuses on supporting construction and demolition waste markets. The Department of Transportation will modify bid specifications for road base, sub-base, and backfill materials to include use of recycled materials, given that the product will not reduce the quality of construction, and is competitive in price.

In addition, although not encountered in the waste stream, the State regulations require the SRRE to address sewage sludge and asbestos. At present, the sewage generated in the City is handled through the sewage treatment system operated by the County Sanitation Districts of Los Angeles County (LACSD). Sewage is treated at the Joint Water Pollution Control Plant in Carson, California and sludge is managed in accordance with applicable environmental permits and regulations.

Asbestos waste, generated as a result of removal projects, is completely regulated by the South Coast Air Quality Management District. Asbestos generated in the City is handled by licensed contractors and is disposed outside of the City. The only landfill in California that is permitted by the State Water Resources Control Board to accept asbestos waste is the BKK Landfill, located in West Covina. The landfill does not have records of the location of the generator for the asbestos waste that is accepted. Therefore, it is not possible to quantify the amount of asbestos waste generated in the City.

6.6 Education and Public Information

Currently, there are no education or public information programs to promote source reduction, recycling, or composting in the City. There are also no education or public information programs currently in the City to promote safe handling and disposal of household hazardous wastes.

6.7 Household Hazardous Wastes

Household hazardous wastes are household discarded materials that may threaten human health or the environment if disposed improperly. Potential hazards are found in materials that are toxic, flammable, corrosive, or reactive. Presently, the City participates in the periodic round-up events sponsored by the County of Los Angeles, Department of Public Works (DPW), and the LACSD.

7.0 GOALS AND OBJECTIVES

7.1 Goals

The City of Hawaiian Gardens is committed to addressing solid waste concerns and system needs through the development of a comprehensive integrated waste management program. The City's goals for integrated waste management, and the development of the Waste Element include the following:

GOAL 1

Maximize interjurisdictional cooperation in integrated waste management planning and implementation.

GOAL 2

Meet the diversion requirements mandated by the Integrated Waste Management Act of 1989.

GOAL 3

Achieve maximum source reduction, recycling, and composting by residential, commercial, and industrial waste generators.

GOAL 4

Extend the useful life of existing landfills used by the City.

GOAL 5

Divert household hazardous waste from disposal in landfills.

GOAL 6

Assist in the development of local, regional, and state markets for diverted materials.

These goals represent Hawaiian Garden's commitment to a comprehensive integrated waste management program.

7.2 Objectives

Specific objectives for each component of the waste element are included below.

7.2.1 Source Reduction

- a. Implement an active Public Information Program to educate residents and businesses on source reduction.
- b. Implement a City/Redevelopment Agency procurement program to purchase products with recycled content.

7.2.2 Recycling

- a. Design and implement recycling programs to be held twice a year for the following: oil, old batteries, and paints.
- b. Evaluate the costs and the feasibility of implementing a curbside sort program for residential and commercial users.
- c. Design and implement a city facilities recycling program for: aluminum, newsprint, glass, plastics, high quality paper, computer and color paper.
- d. Implement a major category sort program within the City's existing fall and spring cleanup program for metal (scrap), wood, green waste, and construction and demolition waste.
- e. Obtain business cooperation and participation in recycling programs.
- f. Implement a public awareness and promotional program to encourage the utilization of existing recycling centers.

7.2.3 Composting

- a. Establish a City sponsored yard waste processing center that will utilize and make products available to other agencies and residents.

7.2.4 Special Wastes

The City has not identified specific objectives to manage special wastes generated in the City.

7.2.5 Education and Public Information

- a. Educate residential generators about AB 939 plans and the programs applicable to their sector
- b. Educate nonresidential generators, and encourage their participation in the City's diversion programs
- c. Expand education and public information programs targeting the residential sector
- d. Expand education and public information program, targeting nonresidential generators

8.0 WASTE MANAGEMENT PROGRAMS

The solid waste management practices which will be continued, expanded, or implemented in the City of Hawaiian Gardens are designed to comply with the integrated waste management hierarchy established by AB 939. Consistent with this hierarchy, the City will promote source reduction activities targeted at decreasing the amount of solid wastes being generated in the City. For wastes that continue to be generated in the City, recycling and composting programs will contribute to diverting waste from disposal to the extent feasible. For wastes that cannot be diverted, the City will ensure that they are landfilled in an environmentally safe manner. The program activities and their effects on existing and future diversion rates, are indicated in Table 1.

The City's specific source reduction, recycling, composting, and disposal activities that are designed to achieve integrated waste management are as follows.

8.1 Source Reduction Programs

The alternatives selected for implementation are indicated below.

- a. Quantity-based Local User Fees
- b. Assistance with On-site Composting and Mulching
- c. Technical Assistance for Non-residential Generators
- d. Educational Efforts
- e. In-house Source Reduction Program Composed of:
 - i. demonstration programs;
 - ii. nonprocurement source reduction activities;
 - iii. government procurement ordinances; and
 - iv. incentives for land-use practices that promote source reduction.

As shown in Table 1, expanded source reduction programs will result in an additional 2.1% diversion by 1995, and 4.7% by 2000. These programs do not require any major new or expanded facilities. The effectiveness of these programs is tied directly to the education and public information activities undertaken by the City.

Table 1

Solid Waste Programs

Program	Existing Diversion (%)	Expected Diversion	
		Short Term (%)	Medium Term (%)
Source Reduction	1.2	2.1	4.7
Quantity-Based Local User Fees			
Assistance with On-Site Composting and Mulching			
Technical Assistance			
Educational Efforts			
In-House Source Reduction Program			
Incentives for Land Use Practices			
Recycling	4.5	11.8	35.9
Curbside Collection: Single-Family and Multifamily			
At-Source Separation and Collection			
Regional Materials Recovery Operation			
Expand Mobile/Stationary Buy-Back Centers			
Various Supportive Policies			
Composting	0	2.8	5.5
Self-Haul Drop-Off			
Decentralized Preprocessing and Materials Storage			
Yard Waste Composting			
Promotion and Education			
Financial Incentives			
Regulatory Measures and Policies			
Special Waste	0.7	1.3	2.7
Used Tire Program			
Construction/Demolition Waste Program			

Table 1 (continued)

Solid Waste Programs

Program	Existing Diversion (%)	Expected Diversion	
		Short Term (%)	Medium Term (%)
Education and Public Information Residential Program - Promotional Campaign - Education and Information Program Commercial/Industrial Program - Promotional Campaign - Education and Information Program Government Program - Representative Waste Evaluations School Program - Waste Reduction and Recycling Curricula	0	(1)	(1)
Total Annual Diversion	7.4	18%	48.8%
With 7.4% Existing Diversion		25.4%	56.2%

(1) No diversion rates are anticipated for educational programs.

8.2 Recycling Programs

To further increase recycling in Hawaiian Gardens, a number of new programs will be implemented, and existing programs will be expanded. These programs require capital expenditures for facilities and/or equipment including residential collection of recyclables, multifamily collection, and buy-back centers. These programs are listed below.

- a. Curbside Collection - single family and multifamily;
- b. At-source Separation and Collection;
- c. Expansion of Mobile/Stationary Buy-back Centers;
- d. Participation in a regional materials recovery operation;
- e. Various supportive policies.

8.3 Composting Programs

The City has targeted yard waste for a composting program. Yard waste includes grass, leaves, and prunings. The composting program will include self haul, decentralized preprocessing, and an educational program, including the following:

- a. Self-haul drop-off;
- b. Decentralized preprocessing and material storage;
- c. Yard waste composting;
- d. Promotion and education;
- e. Financial incentives; and
- f. Various regulatory measures and policies.

This program will contribute an additional 2.8% diversion by 1995, and 5.5% diversion by 2000.

The only significant municipal yard waste processing effort in the region will be operated by the LACSD, as part of the Green Waste Landfill Cover Project. Incoming yard wastes will be screened to remove contaminants (unless it is source separated), ground, and the resulting mulch used as intermediate cover at LACSD landfills. The California Integrated Waste Management Board recently ruled that all yard wastes diverted from landfills for this use will be eligible to be counted toward the diversion goals of 25% and 50%. Like the UPC operation, this program has the potential to utilize nearly all of the yard waste generated within the Los Angeles area.

8.4 Special Wastes Programs

Two alternatives were evaluated and selected for implementation. Alternative 1 is a used tire program, and Alternative 2 focuses on diverting construction and demolition waste in the private sector through new regulatory programs. Implementation of these alternatives will divert 184 tons in the short term and 420 tons in the medium term. The expected diversion percentage from these programs is presented in Table 1.

8.5 Public Information and Educational Programs

Based on the generators and targeted materials, a number of new programs are selected for implementation that target the residential sector, commercial/industrial sector, and schools. Two programs are recommended for the residential sector, two programs for the commercial industrial sector, two for the governmental sector, and one for schools.

The following education and public information programs will be implemented:

- a. Residential promotional campaign;
- b. Residential education and information program;
- c. School curricula development;
- d. Nonresidential promotional campaign;
- e. Nonresidential education and information program; and
- f. Representative waste evaluations.

8.6 Household Hazardous Wastes

Several alternatives were considered for the City's household hazardous waste program. The City will continue to participate in the periodic round-up events sponsored by the LACSD and Los Angeles County DPW. The load-checking programs will continue at all landfills used by the City. There is no capital investment by the City for participation in the County program, as costs are recovered through a surcharge on the landfill tipping fees.

8.7 Solid Waste Facilities

The City will require 23,831 cubic yards capacity by the year 2000, assuming that no additional waste diversion occurs. If the State-mandated goals are achieved, the additional needed capacity will be reduced to 12,855 cubic yards. Presently, there are no plans to establish disposal facilities within the City, however, the City supports the County's Integrated Waste Management Action Plan.

CITY OF HAWAIIAN GARDENS GENERAL PLAN UPDATE



**ECONOMIC
ELEMENT**

ECONOMIC ELEMENT

TABLE OF CONTENTS

	<u>Page</u>
1.0 EXISTING CONDITIONS	E-1
1.1 Demographic Profile	E-1
1.1.1 Population	E-1
1.1.2 1990 Census Summary	E-1
1.1.3 1980-1990 Census Comparison	E-6
1.1.4 Regional Census Comparison	E-6
1.1.5 Conclusions	E-11
1.2 Business and Employment Conditions	E-12
1.2.1 Employment	E-12
1.2.2 Commercial and Industrial Activity	E-12
1.2.3 Growth in Assessed Valuation and Tax Revenues	E-16
1.2.4 Ten Largest Local Secured Taxpayers	E-17
2.0 SIGNIFICANT ECONOMIC DEVELOPMENT ISSUES	E-18
2.1 Location	E-18
2.2 Need for Active Promotion	E-18
2.3 Changing Demographics	E-20
3.0 MARKET OPPORTUNITIES	E-20
3.1 Market Analysis Summary	E-20
3.1.1 Retail	E-20
3.1.2 Commercial Office	E-20
3.1.3 Industrial	E-21
3.1.4 Lodging	E-21
3.2 Conclusions	E-21
4.0 GOALS AND OBJECTIVES	E-22
5.0 RECOMMENDED ACTION PROGRAM	E-23

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Historical Population Data	E-2
2. Regional Growth Forecasts	E-3
3. Population Age Distribution	E-4
4. Comparison of Major Census Characteristics: 1980 to 1990	E-7
5. Historical Population Data: Hawaiian Gardens, Los Angeles County and the State of California	E-8
6. 1990 Median Age by City	E-9
7. 1990 Percent Male and Female by City	E-9
8. 1990 Household and Family Characteristics by City	E-10
9. Median Income and Percent Change from 1979 by City	E-11
10. Los Angeles/Long beach SMSA and City of Hawaiian Gardens Wage and Salary Workers in Non-Agricultural Establishments	E-13
11. Number of Sales Permits and Total Taxable Transactions, 1986 Through 1990	E-14
12. Building Activity and Valuation for Calendar Years 1987 Through 1991	E-15
13. Assessed Valuations	E-16
14. Ten Largest Property Taxpayers	E-17

1.0 EXISTING CONDITIONS

This section will review the historical, existing and projected demographic and economic conditions within the City of Hawaiian Gardens. The section is presented in two parts. The first part presents a demographic profile of the City which establishes the foundation for evaluating economic development in Hawaiian Gardens. The second part examines the economic conditions in Hawaiian Gardens, including both the private and public sectors. The fiscal condition of the City is examined in terms of revenues, expenses and capital improvement programs.

1.1 Demographic Profile

An understanding of the demographics in the study area, through analyses of population trends and projections, age distribution, household tenure, income levels, employment, and other factors, is essential in order to evaluate the City's economic condition and to identify opportunities and constraints for economic development. Comparing the City's demographic characteristics to Los Angeles County, as well as to the neighboring cities of Long Beach, Lakewood, and Cypress, will permit an assessment of the relative performance of Hawaiian Gardens' economy to that of the local market area and the County as a whole.

1.1.1 Population

The stability of the City's population is reflected in Table 1, which shows population figures for the City from 1970 through 1992. From 1970 to 1975, due to the lack of new residential construction within the City, population grew at a moderate rate. Population growth has strengthened since 1975, as a result of increased residential construction, particularly following the issuance of mortgage revenue bonds in 1979. In 1980, the population of Hawaiian Gardens was 10,548, and by 1990, it had grown to 13,639, representing an increase of 29.3 percent over the 10-year period.

Population projections prepared by the Southern California Association of Governments (SCAG) indicate that Hawaiian Gardens will have 16,411 citizens by the year 2010. This represents a 38 percent increase from 1984 to 2010 (Table 2), which is greater than the projected growth rate of 27 percent for Los Angeles County.

1.1.2 1990 Census Summary

A summary and discussion of some of the main 1990 Census data is included in this section. The 1990 Census revealed that the median age in the City is 24.6 years. The largest age group is comprised of persons between 25 and 44 years of age. This group represents 33 percent of the total City population (Table 3).

TABLE 1
HISTORICAL POPULATION DATA

Year	Population	Annual Increase
1970 ⁽¹⁾	9,052	-
1980 ⁽¹⁾	10,548	16.53%
1988 ⁽²⁾	12,177	15.44%
1989 ⁽²⁾	12,361	1.51%
1990 ⁽¹⁾	13,639	10.34%
1991 ⁽²⁾	13,772	0.98%
1992 ⁽²⁾	14,242	3.41%

Notes:

(1) U. S. Bureau of the Census

(2) State of California Department of Finance, Population Research Unit

TABLE 2
REGIONAL GROWTH FORECASTS

	1984	2010	Change
<u>HAWAIIAN GARDENS</u>			
Population	11,814	16,411	38%
Housing	3,338	5,222	56%
Jobs in Place	1,927	3,275	69%
<u>LOS ANGELES COUNTY</u>			
Population	7,862,663	9,948,695	27%
Housing	2,923,560	3,835,386	31%
Jobs in Place	4,053,000	5,523,999	36%

Sources: Southern California Association of Governments; Lockman & Associates, 1992

TABLE 3
POPULATION AGE DISTRIBUTION

Age Group	1980	1990	% Change
Under 5	1,276	1,561	22.3
16+	6,785	9,266	36.5
18+	6,387	8,803	37.8
18-20	-	875	-
21-24	-	1,218	-
25-44	2,857	4,514	57.9
45-54	756	870	15.0
55-59	628	353	1.7
60-64	628	286	1.7
65+	582	687	18.0
75+	187	254	35.8
85+	-	44	-
Total Persons	10,548	13,639	29.3
Median Age	23.2	24.6	

Source: U.S. Bureau of the Census, 1980 and 1990

Of the total population, 7,147 (52%) are male and 6,492 (48%) are female. Persons of Hispanic origin account for approximately two-thirds of the population, or 9,078 persons. For the balance of the community, the number of persons not of Hispanic origin are as follows:

<u>Race</u>	<u>Number</u>
White	2,695
Black	579
American Indian, Eskimo, etc.	62
Asian/Pacific Islander	1,214
Other	11

In 1990, there was a total 3,395 households in the City. Of these, 2,722 (80%) were family households, of which 1,853 (68%) were married-couple families and 600 (22%) were female head of households. The number of persons per family is 4.29 (Table 8).

The City of Hawaiian Gardens has a high number of persons per household (4.0), and a low number of rooms per household (4.0). This indicates that many of the units in the City are overcrowded. At the time that the 1990 Census was taken, there were 123 vacant housing units in the City, representing 3% of all housing units.

The total number of owner-occupied housing units is 1,535, or 43.6 percent of all units. Of the owner-occupied housing units which listed their housing value (1,039), respondents' estimates of how much the property would sell for if it were for sale are as follows:

<u>Value</u>	<u>Number</u>
< \$50,000	21
\$50,000-\$99,999	166
\$100,000-\$149,999	484
\$150,000-\$199,999	284
\$200,000-\$299,000	68
\$300,000+	16

The total number of renter-occupied housing units in Hawaiian Gardens is 1,860. This represents 53 percent of all units. Of the total number of renter-occupied housing units paying cash rent (1,805), monthly rents are reported as follows:

<u>Amount</u>	<u>Number</u>
<\$250	50
\$250-499	572
\$500-749	905
\$750-999	263
\$1,000+	15

1.1.3 1980-1990 Census Comparison

A comparison of the Hawaiian Gardens age characteristics from 1980 to 1990 indicates that while the total population increased 29.3 percent, there was a substantially higher increase in the 25-44 age bracket (see Table 3). A review of other characteristics (Table 4) indicates that during the last 10 years, the percentage of the total Hispanic population has increased to 67%. While population has increased 29.3 percent, the number of housing units increased 11.4 percent. This indicates that the existing units are becoming more overcrowded.

Considering that owner occupied units increased by almost 10 percent and rental units by 16.5% during the 10-year period, and that owner occupied units presently account for only 43.6 percent of the total, there exists a need for additional owner occupied housing in the community.

1.1.4 Regional Census Comparison

A comparison of the economic and demographic characteristics of the City of Hawaiian Gardens, with the surrounding communities of Long Beach, Lakewood, and Cypress, and with the whole of Los Angeles County, provides information relative to the City's regional economic condition.

Population. From 1980 to 1990, the City's population increased approximately 30 percent. By contrast, the population of the County of Los Angeles increased only 18.5 percent during the same time period, from 7,477,421 to 8,863,164. The State of California experienced a 25 percent increase during this same time period, as indicated on Table 5.

Age. According to the 1990 Census, the City of Hawaiian Gardens had a population of 13,639 persons, with a median age of 24.6 years. By comparison, in the Long Beach-Lakewood Census division (which includes the cities of Carson, Cerritos, Compton, Hawaiian Gardens, Lakewood, Long Beach, and Signal Hill), the median age is 30.5 years. As indicated, the median age is significantly lower in Hawaiian Gardens than the surrounding communities (Table 6).

TABLE 4
COMPARISON OF MAJOR CENSUS CHARACTERISTICS
1980 TO 1990

Characteristic	1980	1990	% Change
<u>Population</u>	10,548	13,639	29.3
Percent Hispanic	51.6%	66.5%	28.8
Percent Black	2.8%	4.5%	60.7
Median Age	23.2	24.6	
<u>Total Housing Units</u>	3,156	3,518	11.4
Owner-Occupied	1,398	1,535	9.7
Rental Units	1,596	1,860	16.5
Vacant Units	162	123	-31.7
Median Household Income	\$15,931	\$29,510	85.2
Median Housing Value	\$56,500	\$135,200	239.0
Median Rent	\$294	\$583	98.2

Sources: U.S. Bureau of the Census, 1980, 1990; Lockman & Associates, 1992

TABLE 5
HISTORICAL POPULATION DATA
CITY OF HAWAIIAN GARDENS, LOS ANGELES COUNTY AND CALIFORNIA

Year	City of Hawaiian Gardens		Los Angeles County		State of California	
	Population	Annual Increase	Population	Annual Increase	Population	Annual Increase
1970 ⁽¹⁾	9,052	-	7,041,980		19,971,068	-
1980 ⁽¹⁾	10,548	16.53%	7,477,517	6.18%	23,668,145	18.52%
1988 ⁽²⁾	12,177	15.44%	8,555,937	14.42%	28,018,710	18.38%
1989 ⁽²⁾	12,361	1.51%	8,650,337	1.10%	28,662,249	2.30%
1990 ⁽¹⁾	13,639	10.34%	8,863,164	2.46%	29,760,021	3.83%
1991 ⁽²⁾	13,772	0.98%	8,988,800	1.42%	30,351,000	1.99%
1992 ⁽²⁾	14,242	3.41%	9,087,399	1.10%	30,989,009	2.10%

Sources: U. S. Bureau of the Census;
State of California, Department of Finance, Population Research Unit

TABLE 6
1990 MEDIAN AGE BY CITY

City	Median Age
Hawaiian Gardens	24.6
Long Beach	30.0
Lakewood	33.8
Cypress	33.0
Los Angeles County	30.7

Sources: U.S. Bureau of the Census, 1990; Lockman & Associates, 1992

Gender. The ratio of males to females is different in Hawaiian Gardens as compared to the other cities. As indicated, the number of males in Hawaiian Gardens is slightly higher than in the other communities (Table 7).

TABLE 7
1990 PERCENT MALE AND FEMALE BY CITY

City	Percent Male	Percent Female
Hawaiian Gardens	52.4	47.6
Long Beach	50.5	49.5
Lakewood	49.3	50.7
Cypress	49.2	50.8
Los Angeles County	49.9	50.1

Sources: U.S. Bureau of the Census, 1990; Lockman & Associates, 1992

Household and Family Characteristics

Family households comprise 80% of all Hawaiian Gardens' households, similar to Cypress, but higher than Long Beach and the County. The number of persons per household and family in Hawaiian Gardens is significantly higher than the comparison cities, and the percent of female head-of-families is relatively high, as compared to some of the other cities (Table 8).

TABLE 8
1990 HOUSEHOLD AND FAMILY CHARACTERISTICS BY CITY

City	Family Households			Number of Persons	
	Percent of Total Households	Percent Married Couple	Percent Female Head of Family	Per Family	Per Household
Hawaiian Gardens	80%	68%	22%	4.3	4.0
Long Beach	59%	70%	22%	3.7	2.6
Lakewood	76%	81%	13%	3.2	2.8
Cypress	79%	80%	14%	3.3	3.0
Los Angeles County	67%	72%	19%	3.5	2.9

Source: U.S. Bureau of the Census, 1990

Housing Values

According to the 1990 Census, the median value of an owner-occupied home in Hawaiian Gardens is \$135,200. The median value of homes in the Long Beach-Lakewood Division is \$219,600. By way of comparison, the median value of homes in Artesia is \$205,800; in Bellflower, \$195,200; and in Cerritos, \$300,000.

The median contract rent for Hawaiian Gardens is \$583 per month. By comparison, median monthly rents for the Long Beach-Lakewood division is \$563; in the City of Artesia, it is \$639; in the City of Bellflower, it is \$581 per month; and in the City of Cerritos, \$1,000+. It is interesting to note that rents in the City of Hawaiian Gardens are greater than rents in the cities of Long Beach and Bellflower.

Income

A comparison of income in Hawaiian Gardens with the surrounding communities indicates that the median family income in Hawaiian Gardens is lower than the surrounding cities, however, from 1979 to 1989, incomes in the City increased at a higher rate than increases State-wide or in Lakewood and Cypress (Table 9).

TABLE 9
MEDIAN INCOME AND
PERCENT CHANGE FROM 1979
BY CITY

City	1989 Median Household Income	% Change From 1979
Hawaiian Gardens	\$29,510	17.5
Long Beach	\$31,938	23.8
Lakewood	\$44,700	15.7
Cypress	\$50,981	11.2
California	---	17.1

Sources: U.S. Bureau of the Census, 1990; *Los Angeles Times* 5/11/92

1.1.5 Conclusions

The data presented in Section 1.1.4 reveals some important characteristics of the City in relation to economic conditions and development. By assimilating the individual statistics, Hawaiian Gardens is portrayed as a community with a large sector of the population comprised of younger (under 30), single, male Hispanics. Typically, this portion of the population engages in low paying, transient labor. Another large sector of the population is characterized by females who are the head of households with one or more children. This group comprises 22 percent of all families in the City. Higher than average rents and a low percentage of owner-occupied houses, coupled with the high number of persons per household and the large percentage of family households, indicates that residents often live together in densely occupied rental units.

1.2 Business and Employment Conditions

1.2.1 Employment

The City of Hawaiian Gardens is included in the Long Beach-Los Angeles County labor market area. Table 10 shows a breakdown of the types of employment for the area and the numbers of persons employed in each category for both the overall area and for the City. As indicated, the main source of employment in the City is manufacturing. The City's location relative to the Long Beach, Los Angeles County and Orange County labor market areas affords residents ready access to a variety of employment opportunities, represented in the area's highly diversified employment base. Los Angeles County represents the largest concentration of major industrial firms in the western United States.

The February 1992 unemployment rate in Los Angeles County was 9.9%. The civilian seasonally adjusted rate for California was 9.7%, and for the United States it was 7.3%. (Note: Unemployment rates for counties are not seasonally adjusted.) The overall unemployment rate in Hawaiian Gardens, according to the 1990 Census, was 8.7%.

1.2.2 Commercial and Industrial Activity

There are 287 small businesses in the City. The City's major source of revenue is sales tax. Table 11 shows the number of sales tax permits and value of taxable transactions in the City since 1986.

In May, 1992, Lockman & Associates conducted a detailed land use study of the entire City, including a review of the specific land uses on Carson Avenue and Norwalk Boulevard. The land uses on Carson Avenue and Norwalk Boulevard are listed in Appendix E and may be summarized as follows:

TOTAL USES	229
Businesses	187
Non-Commercial Uses	16
Vacant	26

Table 12 lists the building activity for the City from 1987 through 1991. Prior to 1991, the value of business permits issued annually by the City ranged from \$2.7 to \$8.4 million. This figure has declined to almost half that amount, to a total of \$1.7 million in 1991. Residential permits were issued for 19 to 42 units per year prior to 1991, but permits were issued for only 10 units in 1991.

TABLE 10

**LOS ANGELES/LONG BEACH SMSA AND CITY OF HAWAIIAN GARDENS
WAGE AND SALARY WORKERS IN NON-AGRICULTURAL ESTABLISHMENTS**

Industry	Los Angeles/ Long Beach	Hawaiian Gardens
<u>Total - All Industry</u>	4,189,400	5,593
Agriculture, forestry and fisheries	12,100	189
<u>Subtotal Nonagricultural</u>	4,177,300	5,404
Mining	8,800	13
Construction	145,900	470
Manufacturing - Subtotal	894,500	1,777
Nondurable goods	314,700	601
Durable goods	579,800	1,176
Transportation & public utilities	210,300	227
Wholesale & retail trade	947,100	1,454
Finance, insurance & real estate	287,600	203
Services	1,157,800	1,175
Government - Public Administration	525,300	85

Sources: State of California Employment Development Department, "Annual Planning Information" and "California Labor Market Bulletin, February 1991"; U.S. Bureau of the Census, 1990

TABLE 11
NUMBER OF SALES PERMITS AND TOTAL TAXABLE TRANSACTIONS
1986 THROUGH 1990

Year	Retail Outlets			Total Outlets		
	No. Sales Permits	Annual Sales (\$1000)	Increase [Decrease] (%)	No. Sales Permits	Taxable Transactions (\$1,000)	Increase [Decrease] (%)
1986	118	31,638	-	267	39,669	-
1987	121	35,559	12.39	266	44,063	11.08
1988	134	38,379	7.93	278	45,953	4.29
1989	139	46,477	21.10	272	54,216	17.98
1990	152	58,606	26.10	287	64,695	19.33

Source: State of California, State Board of Equalization, Taxable Sales in California

TABLE 12
BUILDING ACTIVITY AND VALUATION
FOR CALENDAR YEARS 1987 THROUGH 1991
(Valuation In Thousands of Dollars)

	1987	1988	1989	1990	1991
Residential					
New Single Family	\$ 39	\$ 148	\$ 118	\$ 523	\$ 313
New Multi-Family	2,051	2,097	1,079	1,596	398
Additions/Alterations	<u>311</u>	<u>369</u>	<u>726</u>	<u>503</u>	<u>436</u>
Sub-Total Residential	\$2,401	\$2,615	\$1,922	\$2,623	\$1,147
Non-Residential					
New Commercial	\$ 100	\$1,705	\$5,117	\$ 315	\$ 69
New Industrial	0	0	0	200	0
Other	178	47	50	237	78
Additional/Alterations	<u>107</u>	<u>107</u>	<u>1,386</u>	<u>1,179</u>	<u>433</u>
Sub-Total Non-Residential	\$ 384	\$1,859	\$6,553	\$1,932	\$ 580
TOTAL	<u>\$2,766</u>	<u>\$4,474</u>	<u>\$8,475</u>	<u>\$4,555</u>	<u>\$1,727</u>
New Dwelling Units					
Single-Family	1	3	2	6	4
Multi-Dwelling	<u>39</u>	<u>39</u>	<u>17</u>	<u>26</u>	<u>6</u>
Total New Units	<u>40</u>	<u>42</u>	<u>19</u>	<u>32</u>	<u>10</u>

Source: Economic Sciences Corporation, "California Building Permit Activity"

1.2.3 Growth in Assessed Valuation and Tax Revenues

Table 13 shows growth in assessed valuations and tax revenues since 1982-83. In the last decade, total assessed valuation has doubled, from \$148 million in 1982, to \$317 million in 1992.

TABLE 13
ASSESSED VALUATIONS

	Secured	Utility	Unsecured	Total ⁽¹⁾
1982-83	\$135,613,790	\$4,770,450	\$ 7,850,982	\$148,235,222
1983-84	145,433,331	5,217,550	7,017,049	157,667,930
1984-85	161,140,282	5,393,320	7,822,083	174,355,685
1985-86	169,393,682	6,126,420	7,933,691	183,453,793
1986-87	184,433,273	7,399,490	7,637,729	199,470,492
1988-89	230,919,141	120	13,106,404	244,025,665
1989-90	247,982,348	12,650	13,304,904	261,299,902
1990-91	275,180,745	10,200	15,700,000	290, 890,965
1991-92	299,869,029	10,200	17,816,378	317,695,607

Notes:

(1) Before deduction of tax allocation increment (\$50,825,380 in 1991-92)

Sources: County of Los Angeles; California Municipal Statistics, Inc.

1.2.4 Ten Largest Local Secured Taxpayers

Table 14 indicates the local 1991/92 assessed valuation for the ten largest local property taxpayers. The City of Hawaiian Gardens Redevelopment Agency, which is not shown in Table 14, holds property of approximately \$6.5 million in assessed value, comprising 39 parcels of property.

TABLE 14
TEN LARGEST PROPERTY TAXPAYERS

Owner (Number of Parcels)	1991/92 Secured Assessed Valuation	Percentage of Total 1991/92 Assessed Valuation
1. Cerritos Gardens General (14)	\$13,563,904	4.52
2. Norwalk & Carson Associates (5)	9,363,996	3.12
3. Sanford Deutsch (1)	9,358,500	3.12
4. Hawaiian Gardens Square (5)	6,836,382	2.28
5. Bancap Storage Properties VII (1)	6,324,000	2.11
6. Albertson's Inc. (1)	4,911,349	1.64
7. Hawaiian Gardens Apartments (1)	4,875,391	1.63
8. Irene D. Webb Company-Trust (2)	4,783,754	1.60
9. II Young & Myeong K. Kim (2)	3,448,922	1.15
10. Frederick J. Leaf Company Trust (4)	<u>2,800,674</u>	<u>0.93</u>
	<u>\$66,266,872</u>	<u>22.10%</u>

Source: Hinderliter, de Llamas and Associates

2.0 SIGNIFICANT ECONOMIC DEVELOPMENT ISSUES

2.1 Location

Hawaiian Gardens is situated within the Los Angeles/Orange County consolidated area, with its position adjacent to the 605 Freeway just north of the 405 Freeway. It is also centrally located between Los Angeles Airport (LAX) and Orange County (John Wayne) Airports, is just three miles east of the Long Beach Airport, and is close to the ports of Long Beach and Los Angeles. Hawaiian Gardens' location is an asset, however, it should be noted that there are several other communities and cities within the Southern California metropolitan area with similar locational advantages, and other cities even closer to these air and sea ports, with similar freeway access.

The City's location is not significantly more competitive than most of the surrounding communities, and is not enough to generate increased business and retail sales activity on its own. Economic development within the City will require a concerted effort on the part of the City Council and staff, as well as the community members as a whole.

2.2 Need for Active Promotion

Hawaiian Gardens needs to continue to actively promote itself in order to bring quality businesses to the City. Section 5.0 highlights the recommended action program, and presents examples of economic enhancement incentives and redevelopment projects that are intended to attract businesses, developers and retailers.

The use of low and moderate income funds by the City's Redevelopment Agency, together with redevelopment projects, is perceived by most developers and businesses as an indication that a city is committed to economic enhancement through every available means. This is an important consideration for any developer, investor or business entity, since the city's long-term commitment is being interpreted as a risk reduction factor for potential new developments. Redevelopment is also affording the City the option of financing public land acquisition and improvements through tax increment financing through its tax allocation bond issues.

2.3 Changing Demographics

As elaborated in the preceding section, Hawaiian Gardens' demographics are changing. The City is indeed becoming predominantly renter-occupied, and its ethnic makeup is also shifting. The Housing Element will demonstrate that the shift towards tenant occupancy is a County-wide phenomenon, which is in large part attributable to the rapidly escalating cost of housing in Southern California. However, Hawaiian Gardens' high proportion of tenant occupants, coupled with a high incidence of absentee landlords, is causing disrepair and deterioration of resident properties in various areas of the City.

To address the needs of owner-occupied affordable housing, the Agency entered into the SB-99, Mortgage Revenue Bond Program. The goal was developed, and funded approximately 500 condominium dwelling units that would be affordable to first-time home buyers and to help spur private investment in the community. Development constraints were modified to provide adequate densities to motivate developers to select Hawaiian Gardens for the desired development product. This action gave developers the economic incentive to recycle older structures, allowing another opportunity to make housing available at more affordable prices.

The City and the Redevelopment Agency are presently considering other mechanisms to facilitate the development and construction of low, moderate and middle-income owner-occupied housing. A joint public-private venture could be created and financed through issuance of additional mortgage revenue bonds. This program may be supplemented by the Department of Housing and Urban Development (HUD) for cooperative housing projects of five or more dwellings to be occupied by members of nonprofit cooperative ownership housing corporations. HUD also sponsors the "Joint Venture for Affordable Housing", a program which provides information and technical assistance to State and local governments, citizens and developers. The City is also considering the use of various City/Agency revenues for the development of new housing and related primary and secondary jobs. A detailed outline of a prototype housing-assistance program is discussed in the Housing Element.

3.0 MARKET OPPORTUNITIES

This section includes a market analysis summary of potential retail, commercial, industrial and lodging uses for the City, with a focus on the areas of opportunity for future development within the City. Section 4.0 describes the goals and objectives of an economic development strategy, and finally, Section 5.0 presents a preliminary action plan for the City, highlighting the major elements of a recommended economic development strategy. Based on input received from the City and other interested parties, the adopted action program should be detailed, and should formulate an implementation plan specifying distinct actions the City can undertake to achieve its objectives.

3.1 Market Analysis Summary

In 1988, Economic Research Associates (ERA) prepared a Market and Economic Development Forecast for the City. The ERA study reviewed market conditions, activity levels, and demand potential for several real estate products within the City of Hawaiian Gardens. The opportunities that were discussed in the study are only now being realized, due to the intervening years of recession. The report findings are summarized below.

3.1.1 Retail

In 1988, the Hawaiian Gardens retail marketplace was primarily based on neighborhood-serving retail activities. While surveys at that time revealed that existing retail activity adequately met the local demand for general merchandise, further analyses indicated an opportunity to recapture home improvement and auto sales dollars, which are currently expended by the City's residents at locations in surrounding communities. In response to this need, the City was able to capture Home Base, which is now located on Norwalk Boulevard.

Other development opportunities in the Hawaiian Gardens retail market have been informally proposed by local developer/property owners. One such concept includes a "mercado" class retail/entertainment center, which would draw its users from a much larger market area than that which supports the existing Hawaiian Gardens general merchandise marketplace. Given the unique development concept of a "mercado", and the potential for direct economic impact on the local Hispanic population, City officials may still want to explore this opportunity, assuming such aspects as quality of development, management, and support by the local community are apparent. One potential development opportunity would be for one additional supermarket/drug store, with perhaps an additional major retail tenant. Another opportunity exists in the home furnishings/appliances area. In 1987, the City captured only 26 percent of its potential sales in the home furnishings/appliances market.

3.1.2 Commercial Office

Hawaiian Gardens has not captured a significant amount of new office space during the time period analyzed, and in the region which has been used for reference. However, the City currently has several office development opportunities, owing to the availability of land owned by the Redevelopment Agency and several vacant privately owned parcels. If Hawaiian Gardens can increase its competitive edge, the City might capture from 40,000 to 50,000 square feet of new general purpose office space over the next five-year period.

3.1.3 Industrial

A number of cities within the Hawaiian Gardens market area are actively seeking industrial and business park development by offering attractive financial/redevelopment programs. Generally, the developments are large projects requiring substantial parcels of vacant land. Consequently, most of the available sites in Hawaiian Gardens appear better suited for office development, particularly inasmuch as the available sites are not very large and the Agency does not plan major new land clearance. Some limited industrial development may be suitable for those parcels zoned "M", which are currently underutilized, either as yard and commercial storage, or as mobile home parks.

In general, industrial development within Hawaiian Gardens was not considered to be a likely prospect within the planning horizons of the ERA economic analysis. Also, the City may not wish to pursue major industrial uses, as it does not often generate general fund revenues and the positive fiscal impact associated with the higher economic activity level of commercial uses.

3.1.4 Lodging

Based upon ERA's analysis, development of a new first-class lodging (i.e., Sheraton Hotel, Hilton Hotel) within Hawaiian Gardens is unlikely without a major marketing effort by the City. Redevelopment Agency officials may wish to pursue existing hotel development proposals to encourage a high-quality development if proven economically feasible by the developer. However, it is unlikely that lodging facilities would choose to locate any place other than as close to the 605 Freeway as is economically possible. On the other hand, Hawaiian Gardens should benefit from any new first-class hotel development. A new first-class hotel, even if not within precise City boundaries, would boost the local economy and act as an aid to the market capture of commercial uses which are better suited for development within the City proper.

3.2 Conclusions

Based on information gathered from previous economic analyses, the following problems and opportunities have been identified in Hawaiian Gardens:

1. Hawaiian Gardens must actively promote itself to bring quality businesses into the City, including major discount retail uses, local service establishments and used auto sales.
2. Hawaiian Gardens is becoming a city of renters (53 percent in 1990), and the City should promote home ownership as a way to assist in the stabilization of the community. The ethnic make-up is also shifting, which impacts the type of economic development that is needed, including the demand for Hispanic oriented services.
3. Hawaiian Gardens is well located next to the 605 (San Gabriel) Freeway, and in close proximity to the 405 (San Diego), 5 (Santa Ana), 91 (Riverside) and 105 (Century) Freeways, making it accessible to the Los Angeles/Orange County region. It is centrally located between Los Angeles International Airport and Orange County Airport, and is only three miles from Long Beach Airport. The City's proximity to air and sea ports affords opportunities for future development yet to be pursued.

4.0 GOALS AND OBJECTIVES

The following formulates the economic enhancement goals and objectives of the City of Hawaiian Gardens:

1. Increase the number and quality of jobs in Hawaiian Gardens;
2. Improve the job skills for the existing work force in Hawaiian Gardens;
3. Rehabilitate existing commercial, industrial and residential areas;
4. Maintain a healthy balance between economic growth and environmental quality;
5. Actively promote Hawaiian Gardens as a place to do business;
6. Increase coordination between the Chamber of Commerce and the City to attract new business;
7. Establish a Business Improvement District to promote business activity and to coordinate with City-sponsored events;
8. Coordinate a listing of all city businesses for public distribution;
9. Generate additional marketing information;
10. Attract corporations to establish stores and offices in Hawaiian Gardens as an indirect means of increasing retail sales generation;
11. Improve coordination between the various agencies working to promote Hawaiian Gardens, and encourage citizen support of an overall economic development strategy for the City;
12. Preserve retail trade specialties which have concentrated in Hawaiian Gardens, and work to diversify these specialties to meet the City's needs;
13. Develop new housing as a way to generate employment and skills training;
14. Encourage acceptable high revenue-producing retail land uses. Discourage uses in commercial areas which do not contribute positively to the overall economy of Hawaiian Gardens; and
15. Develop Specific Plans for the development of select commercial areas.

Based on a review of the identified opportunities for the City, the above goals and objectives are prioritized into the recommended action program in Section 5.0.

5.0 RECOMMENDED ACTION PROGRAM

Based on the identified problems and opportunities, and in support of the goals and objectives, the following action program items are recommended for the economic enhancement of the City of Hawaiian Gardens:

1. **Review of Zoning:** A study of the current zoning should be undertaken as soon as possible. There should be stricter enforcement of ordinances that require upkeep. A volunteer Beautification Committee should be established.
2. **Establish Priorities for Development:** The City must plan which additional areas should be developed next and specific plans should be developed. A list of possible land uses needs to be established. Rezoning will require that each new development go before the appropriate board or commission.
3. **Market the City of Hawaiian Gardens:** Working with the Chamber to market the City to business and developers, assist business and developers in coordination with the other agencies, and seek sources of revenue for development by:
 - a. Attracting new high quality businesses to the City, and
 - b. Pursuing the possibility of attracting office and retail uses with sales tax dollars that can be increased substantially by a company that has an outside sales force.
4. **Retain Hawaiian Gardens' Existing Top Sales Producers** - in order to keep existing retail sales from declining even further. Hawaiian Gardens should continue to compete to keep its top retailers.
5. **Better Use of Currently Under-utilized Properties** - by attracting and working with quality developers and businesses. The City shall develop specifics of currently under-utilized properties.
6. **Establish Economic Development Staff Capability** - with primary responsibility of promoting the City to businesses and developers. This capability will help retain and attract retail dollars to the City.
7. **Implement a Housing Program** - to replace dilapidated homes and to rehabilitate existing structures.

CITY OF HAWAIIAN GARDENS
GENERAL PLAN UPDATE



**CAPITAL
IMPROVEMENT
ELEMENT**

CAPITAL IMPROVEMENT ELEMENT

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	CI-1
2.0 PROPOSED CAPITAL IMPROVEMENTS	CI-1
2.1 Underground Utilities	CI-1
2.2 Landscaped Medians	CI-1
2.3 Traffic Signals	CI-1
2.4 Water System	CI-1
2.5 Sewer System	CI-3
2.6 Street Improvements	CI-5
2.7 Parks/Other Facilities	CI-8
2.8 Fire Station	CI-8
2.9 Storm Drains	CI-8
3.0 COST OF CAPITAL IMPROVEMENTS	CI-9
3.1 Source of Funds	CI-9
4.0 GOALS, OBJECTIVES AND POLICIES	CI-12
4.1 GOAL 1	CI-12
Objective 1.1	CI-12
Objective 1.2	CI-13
Objective 1.3	CI-13
4.2 GOAL 2	CI-14
Objective 2.1	CI-14
Objective 2.2	CI-14

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Existing Major Water Lines	CI-4
2. Existing Sewer System	CI-6

LIST OF TABLES

1. Capital Improvement Cost Summary	CI-10
-------------------------------------	-------

1.0 INTRODUCTION

As a result of the goals, objectives and policies of the General Plan, it will be necessary to implement certain capital improvements over the next twenty years. This Capital Improvement Element is intended to outline the major improvements that will be necessary to implement the General Plan. This Element is not intended to be a Capital Improvement Program (CIP) or a five-year program. Those programs detail year by year requirements, and typically are established by an intensive work program of the major City departments.

2.0 PROPOSED CAPITAL IMPROVEMENTS

The Hawaiian Gardens General Plan Update envisions the following Capital Improvements for the City over the next twenty years. Completion of these improvements will aide in the completion of many goals contained within the General Plan.

2.1 Underground Utilities

The installation and completion of all underground utilities along Norwalk Boulevard, roughly 7,500 lineal feet of undergrounding, will be required. Undergrounding Funds Rule 21 from Southern California Edison and Redevelopment Funds will be used over the life of the plan. This supports the need identified in Sections 4.0 and 4.1 of the Open Space/Recreation Element.

2.2 Landscaped Medians

Approximately 2,500 lineal feet of landscaped medians are proposed for Norwalk Boulevard, south of Carson. Landscaped medians are only recommended on major arterials. No median landscaping is recommended for Norwalk Boulevard north of Carson due to its limited width. This supports Section 6.2 of the Open Space/Recreation Element and Section 3.3 of the Circulation Element.

2.3 Traffic Signals

Signals at three intersections may require upgrading to accommodate existing and proposed traffic. The installation of specific signals will require more detailed traffic engineering analysis. Candidate intersections include: 1) Norwalk Boulevard and 216th Street; 2) Carson and Belshire; and 3) Norwalk Boulevard and 219th Street.

Existing signals have been interconnected on Carson Street by the Los Angeles County Department of Public Works and they are currently working on Pioneer Boulevard. These projects support Section 3.4 of the Circulation Element.

2.4 Water System

Water mains which are necessary to provide adequate fire protection to the City and complete the loop systems are illustrated in Figure 1 and include pipe installation at the following locations:

2.4.1 Senior Citizen Housing Project

This project, constructed on 226th Street, west of Norwalk Boulevard, requires a fire flow of 4,500 gpm. There is currently about 2,200 gpm available. To meet the required flow, 1,800 feet of 12-inch main will be installed in 226th Street and Norwalk Boulevard.

2.4.2 Hawaiian Avenue Between Carson Street and 221st Street

This residential area is served by a 4-inch main. To supply 2,500 gpm, 1,070 feet of 8-inch main should be installed in Hawaiian Avenue.

2.4.3 Vicinity of 214th Street and Belshire Avenue

This residential area is served by 4-inch cast iron mains. To meet the required flow, 3,250 feet of 8-inch main should be installed in 213th Street, 214th Street, and Belshire Avenue.

2.4.4 Horst Avenue Between 214th Street and Tilbury Street

This residential area is served by a 4-inch AC main. It should be replaced with 1,000 feet of 8-inch main.

2.4.5 Vicinity of Arline Avenue and 221st Street

This single-family residential area is served by an incomplete network of 6-inch AC, 4-inch AC and 2-inch steel mains. To meet the required fire flow, 550 feet of 8-inch main should be installed in 221st Street from the alley east of Arline Avenue to the alley east of Clarkdale Avenue and from the alley east of Devlin Avenue to Elaine Avenue.

2.4.6 Area bounded by 222nd Street, Wardham Avenue, 226th Street, and Belshire Avenue

This single-family residential area is served by 3-inch and 4-inch AC mains located in easements. To improve the flows, 1,750 feet of 8-inch main should be installed in Belshire and Claretta Avenues from 223rd Street to 226th Street.

2.4.7 Single-family Residential Areas; 4-inch Mains

Fire flow from these 4-inch AC mains is typically about 800 gpm which is below the current requirement. They should eventually be replaced with 8-inch mains. Streets or alleys in Figure 1 that do not show water mains currently have 4-inch mains.

2.4.8 Fire Hydrants

Fire hydrants will be installed along the new water mains at 350-foot intervals. Twenty-nine hydrants will be required for the trunk system and approximately 100 new hydrants will be required for the 4-inch to 8-inch upgrade.

2.4.9 Priority Groups

Recommended main replacements, listed in Sections 2.4.1 through 2.4.8, may be categorized into the following priority groups.

<u>Group</u>	<u>Description</u>	<u>Length (lineal feet)</u>
a.	Improve major fire flow deficiencies	10,070
b.	Replace 4-inch mains	36,250

Installation of improved water systems supports Section 5.0, Goal 1.2, of the Safety Element, and Section 2.2.2 of the Conservation Element.

2.4.10 Other Required Facilities

- a. Construction of a new well at Centralia;
- b. Construction of a 1.0 MG reservoir and boosters at Centralia; and
- c. Construction of a new MWD connection on Wardlow Road.

The existing and proposed facilities are illustrated in Figure 1.

2.5 Sewer System

Improved sewers in the southern half of the community will be required to service the planned land uses. The required sewers are as follows:

2.5.1 10-Inch Sewers

- a. Upgrade 8-inch sewer to 10-inch on 221st Street from Claretta Avenue to Norwalk Boulevard - 1,300 L.F.;
- b. Increase 8-inch sewer to 10-inch east of Norwalk Boulevard, between 224th Street and Brittain Street - 250 L.F.

2.5.2 12-Inch Sewers

- a. Upgrade 10-inch sewer to 12-inch on 221st Street from Norwalk Boulevard to Horst Avenue - 600 L.F.;
- b. Upgrade 8-inch sewer to 12-inch east of Norwalk Boulevard between Brittain Street and 226th Street - 250 L.F.

2.5.3 15-Inch Sewers

- a. Upgrade 10-inch sewer to 15-inches on 221st Street from Horst Avenue to Elaine Avenue - 800 L.F.

GENERAL PLAN UPDATE - 1992

12 INCH LINE

10 INCH LINE

8 INCH LINE

6 INCH LINE

CONNECTED

NOT CONNECTED

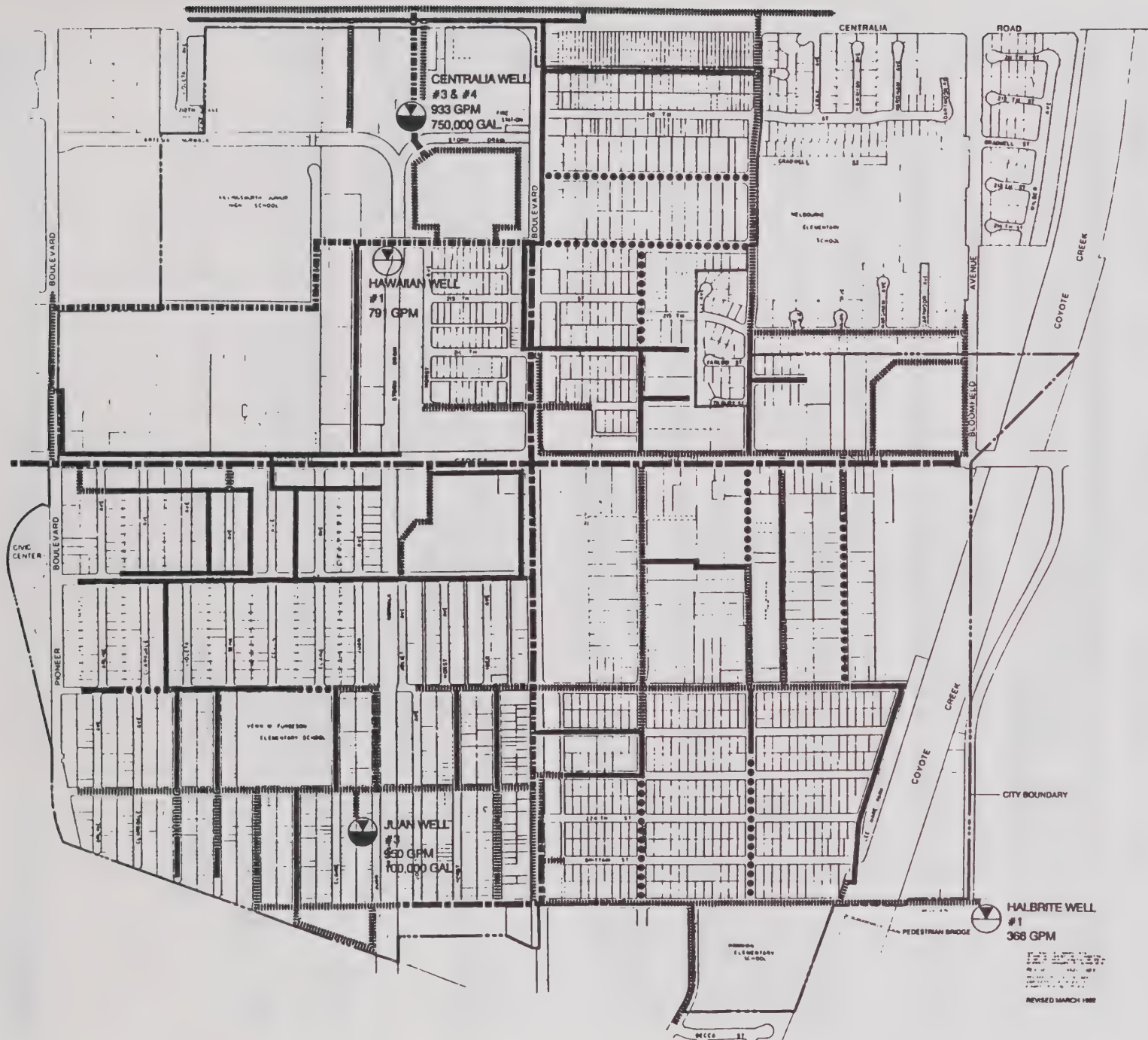
PRODUCTION WELL

PRODUCTION WELL WITH RESERVOIR

PROPOSED 8 INCH LINE



1



2.5.4 Sewer Summary

The sewer requirements may be summarized as follows:

<u>Size</u>	<u>Length (Lineal Feet)</u>
10-inch	1,550
12-inch	850
15-inch	800

Existing and proposed sewer system facilities in the City are illustrated in Figure 2.

Existing and future sewers in the northern part of the community are adequate in capacity. Several locations in the southern part of the City will require upgrading as new development occurs. Based on past building trends, no new sewers will be required for 10 to 15 years. If new development rapidly increases, this timeframe may be shortened. New sewers would be required on 221st Street between Elaine and Claretta and on 226th Street west of Norwalk and the alley east of Norwalk between 214th Street and 226th Street (see Figure 2). Because the drainage area is so flat, upgrades have been limited from 2 to 4 inches to preserve adequate flows. Larger sewer pipes are only required for the most downhill portion of an individual drainage area.

To defer the future costs of these facilities, it may be appropriate for the City to institute "Developer Impact Fees". It would be possible to create a direct "Nexus" between future development in an area and the required improvements pursuant to AB1600 and SB372.

2.6 Street Improvements

The Circulation Element has recommended a variety of improvements to the circulation system. In the year 2012, all streets except Carson Street will be functioning at LOS "C" or better. The prohibition of parking and the striping of one additional through lane on Carson Street (three lanes each direction) in the latter part of the planning period will also allow Carson Street to operate at LOS "C" ($35,300/45,000 = 78.4$ percent). LOS "C" represents stable operations and is a reasonable community standard.

Other street improvements, discussed in Section 5.0 of the Circulation Element and illustrated in Figure 2 of the Circulation Element, include the following street widenings and other improvements.

GENERAL PLAN UPDATE - 1992

----- 8" SEWER TYP.

////// SEWER GREATER THAN 8" - SIZE SHOWN

●●●●● JOINT OUTFALL "C" - NOT CONNECTED
TO LOCAL SEWERS

SEWERS THAT WILL NEED IMPROVEMENTS

- ① EXIST 8" - INCREASE TO 10"
- ② EXIST 10" - INCREASE TO 12"
- ③ EXIST 10" - INCREASE TO 15"
- ④ EXIST 8" - INCREASE TO 10"
- ⑤ EXIST 8" - INCREASE TO 12"



REVISED MARCH 1990

2

2.6.1 Street Widening East of Norwalk

Streets east of Norwalk Boulevard suitable for widening include the following segments:

<u>Street</u>	<u>Length (Lineal Feet)</u>
222nd Street	2,050
223rd Street	1,975
224th Street	1,900
Brittain Street	1,850
Belshire Avenue	1,250

2.6.2 Street Widening South of Carson

Streets south of Carson suitable for widening include:

<u>Street</u>	<u>Length (Lineal Feet)</u>
Claretta Avenue	1,300
Verne Avenue	1,300
Hawaiian Avenue	1,300

2.6.3 Street Widening West of Norwalk/North of Carson

Street widening of Norwalk Boulevard and north of Carson suitable for widening include:

<u>Street</u>	<u>Length (Lineal Feet)</u>
215th Street	610
216th Street	610
Tilbury Street	610
Horst Avenue	950
Violeta Avenue (new street)	825

2.6.4 Street Widening South of 221st

Street south of 221st Street suitable for widening includes:

<u>Street</u>	<u>Length (Lineal Feet)</u>
Juan Avenue	1,300

These improvements would include removal, grading, utility relocation, curbs, gutters, sidewalks, subgrade, asphalt, street lighting and catch basins.

2.6.5 Other Circulation Improvements

Other circulation improvements are from Section 5.5 of the Circulation Element and include: 1) Arline, Clarkdale, Violeta and Seine Avenues; 2) Farlow Street; 3) 226th Street; and, 4) Killingsworth Pedestrian Access. Specific cost estimates for these facilities are difficult to estimate because they require specific design solutions that are currently not well known or involve other more complex land use issues. A preliminary estimate for these "Other Facilities" is listed in Table 3.

2.6.6 Pavement Management

In June 1988, the City prepared a City-wide Pavement Management Study and Program. This report indicated that approximately \$800,000 should be expended on street maintenance in the years 1988 and 1989, and that \$27,000 to \$40,000 per year would be adequate thereafter.

2.7 Parks/Other Facilities

The Land Use and Open Space/Recreation Elements recommend that, during the next 20 years, the City add two new parks and other open space improvements. One new park is recommended to be located between Verne Avenue and Hawaiian Avenue, south of Carson Street, and a second new park is recommended to be developed east of Norwalk between 213th and 214th Streets. Other facilities may be developed in the Civic Center area. These parks would be neighborhood facilities.

These two facilities would meet the need for additional Open Space/Parks that is identified in the Open Space/Recreation Element, Section 2.2.1.

2.8 Fire Station

The Land Use Element identified that a new fire station would be required during the planning period. The exact location will be determined at a later date, however, it is suggested to be located east of Norwalk Boulevard in the vicinity of 214th Street on property that would be one-half to one acre in size. This fire station is intended to replace the existing, deteriorated and outdated facility at Norwalk Boulevard and 213th Street. The existing facility does not meet current L.A. County Fire Department Station Standards for size and facilities. This project supports Sections 5.4 and 5.8 of the Land Use Element.

The Open Space/Recreation Element suggests that the long-term use of property located south of Carson and east of Pioneer may be suitable for such facilities as a Sheriff Community Station, a library and a day care center. The Element also identifies the need for additional swimming facilities in this area.

2.9 Storm Drains

Existing storm drain facilities in the area include the San Gabriel River (see Safety Element, Section 3.2.4), Coyote Creek, and the Artesia-Norwalk Storm Drain. Facilities providing drainage in the community appear to be adequate. The January 1993 storms did not result in any excessive flooding. The 1985-1990 Capital Improvement Program designated \$25,000 to conduct a City-wide Drainage Program which would review all local drainage areas, catch basins and other storm drain facilities.

3.0 COST OF CAPITAL IMPROVEMENTS

The estimated costs for the necessary Capital Improvements are shown in Table 1. The City will evaluate these capital needs each year during the budget process and make recommendations for expenditures for these and other projects. The projects can only be implemented as funds permit. The cost estimates are in 1992 dollars and should be adjusted against the Los Angeles/Long Beach Consumer Price Index.

3.1 Source of Funds

Funds for capital projects include Federal, State, local, recreation, water and electric utility sources. Federal sources may include Community Development Block Grant, Federal Aid Urban, Federal Demonstration Projects and Revenue sharing. State funds may include, but are not limited to, Arterial Highway Funds, SB 821 Grants, State Gas Tax, State Demonstration Projects, and State Park Bonds. Local funds may include, but are not limited to, the General Fund, sale of land, park development charges, redevelopment and other local funds. Water and electrical utility funds may include construction bonds and Rule 21 Funds.

TABLE 1
SUMMARY OF COSTS FOR CAPITAL IMPROVEMENTS

	<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
2.1	Underground Utilities	7,500 L.F. ⁽¹⁾	\$150/L.F.	\$ 1,125,000
2.2	Landscaped Medians	2,500 L.F.	\$100/L.F.	\$ 250,000
2.3	Traffic Signals	3 ea.	\$100,000 ea.	\$ 300,000
2.4	<u>Water System</u>			
	12" main	1,800 L.F.	\$80/L.F.	\$ 144,000
	14" main	8,270 L.F.	\$80/L.F.	\$ 661,600
	8" main (replace 4")	36,250 L.F.	\$80/L.F.	\$ 2,820,000
	Hydrants	133 ea.	\$3,000 ea.	\$ 399,000
	Water Well	1 ea.	\$250,000 ea.	\$ 250,000
	Reservoir	1 million gal.	\$1,200,000 ea.	\$ 1,200,000
	MWD connection	---	---	\$ 2,000,000
2.5	<u>Sewer System</u>			
	10-inch	1,550 L.F.	\$210/L.F.	\$ 325,500
	12-inch	850 L.F.	\$225/L.F.	\$ 191,250
	15-inch	800 L.F.	\$240/L.F.	\$ 192,000
2.6	<u>Street Improvements</u>			
	2.6.1 East of Norwalk:			
	222nd Street	2,050 L.F.	\$90/L.F.	\$ 184,500
	223rd Street	1,975 L.F.	\$90/L.F.	\$ 177,750
	224th Street	1,900 L.F.	\$90/L.F.	\$ 171,000
	Brittain Street	1,850 L.F.	\$90/L.F.	\$ 166,500
	Belshire Avenue	1,250 L.F.	\$90/L.F.	\$ 112,500
	2.6.2 South of Carson:			
	Claretta Avenue	1,300 L.F.	\$90/L.F.	\$ 117,000
	Verne Avenue	1,300 L.F.	\$90/L.F.	\$ 117,000
	Hawaiian Avenue	1,300 L.F.	\$90/L.F.	\$ 117,000
	2.6.3 West of Norwalk/North of Carson:			
	215th Street	610 L.F.	\$90/L.F.	\$ 54,900
	216th Street	610 L.F.	\$90/L.F.	\$ 54,900
	Tilbury Street	610 L.F.	\$90/L.F.	\$ 54,900
	Horst Avenue	950 L.F.	\$90/L.F.	\$ 85,500
	Violeta Avenue (new street)	825 L.F.	\$140/L.F.	\$ 115,500
	2.6.4 South of 221st Street:			
	Juan Avenue	1,300 L.F.	\$90/L.F.	\$ 117,000

TABLE 1
(Continued)

SUMMARY OF COSTS FOR CAPITAL IMPROVEMENTS

<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
2.6.5 Other Facilities:			
Arline-Seine	Lump Sum/Land & Streets		\$ 450,000
Farlow Street	Lump Sum/Land & Streets		100,000
226th Street	Lump Sum/Land & Streets		50,000
Killingsworth	Lump Sum Improvements		20,000
2.6.6 Pavement Reconstruction			
Annual	20 Yrs.	\$40,000/Yr.	\$ 800,000
2.7 <u>Parks/Other Facilities</u>			
2.5 acres (acquire & construct)	108,900 S.F.(2)	\$25/S.F.	\$ 2,722,500
Sheriff Station	1	\$1,500,000	\$ 1,500,000
Library	1	900,000	900,000
Day Care	1	500,000	500,000
2.8 <u>Fire Station</u>			
Land	33,000 S.F.	\$18/S.F.	\$ 594,000
Improvements	6,000 S.F.	\$150/S.F.	\$ 900,000
2.9 Storm Drain Study	1	\$25,000	\$ 25,000
<u>SUBTOTAL - IMPROVEMENTS</u>	---	---	<u>\$20,065,800</u>
- ENGINEERING/MGT./LEGAL ---		20%	<u>\$ 4,013,160</u>
<u>TOTAL</u>			<u>\$24,078,960</u>

Source: Lockman & Associates, 1992.

Notes:

- (1) Lineal Feet
- (2) Square Feet

4.0 GOALS, OBJECTIVES AND POLICIES

GOAL 1

Develop water, sewer, traffic, fire and other facilities that provide the greatest service at the least expense.

Objective 1.1

Provide adequate water, wastewater/sewer, electrical, natural gas, and telecommunications systems to meet the demands of new and existing development.

Policies

- 1.1.1 Provide for the construction of upgraded and expanded water and sewer systems to support existing and new development.
- 1.1.2 Provide for the maintenance of existing water, sewer, and storm drainage systems.
- 1.1.3 Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication and other supporting infrastructure.
- 1.1.4 Establish and maintain a record of the capacity and utilization of sanitary water supply, and infrastructure serving the City, monitoring the impacts and demands of new development, and, as necessary, managing development to mitigate the impacts and/or facilitating improvements.
- 1.1.5 Provide for the continued development and expansion of telecommunications systems including cable and, as feasible, fibre optics for entertainment, education, culture, access of data and information, two-way communication between government and residents and businesses, and other similar purposes.
- 1.1.6 Require that all new construction intended to be used for professional offices be wired to link with cable and, potential, fibre optic systems.
- 1.1.7 Work with the City's water purveyors to provide and maintain water system master plans with defined capital improvements schedules.
- 1.1.8 Provide adequate illumination of all streets, alleys, and public areas, upgrading areas which are deficient and maintaining lighting fixtures in good working condition.

Objective 1.2

Continue to reduce solid waste and wastewater generation and provide for the safe collection of waste from Hawaiian Gardens' residents.

Policies

- 1.2.1 Develop standards to minimize water usage throughout the City of Hawaiian Gardens.
- 1.2.2 Continue to encourage the reduction of the local waste stream by participation in and implementation of AB 939 Recycling Programs, as outlined in the Waste Element of this General Plan Update.
- 1.2.3 Promote water and wastewater conservation practices to reduce the sewerage flows from existing and future developments.
- 1.2.4 Consider requiring new development to recycle reusable wastewater for secondary purposes not requiring potable water.
- 1.2.5 Provide for adequate trash removal, installation and maintenance of trash receptacles on streets, alleys and in parks, and regular street sweeping.
- 1.2.6 Monitor and periodically reassess rates for sanitation services for existing uses and connection and services for new development in the City of Hawaiian Gardens; insuring that costs are equitably borne by beneficiaries.

Objective 1.3

Ensure that those who benefit bear the costs of infrastructure improvements.

Policies

- 1.3.1 Continue to require developers of new projects to pay for the costs of construction and expansion of water, and sewer/wastewater improvements which are necessitated by that development.
- 1.3.2 Provide for the formation of benefit assessment districts in which those who benefit from infrastructure improvements pay a prorated share of the costs.
- 1.3.3 Provide public funding of water, sewer and other infrastructure improvements when such improvements are needed to benefit significant city populations.

GOAL 2

Identify and prioritize infrastructure projects within the City of Hawaiian Gardens.

Objective 2.1

Ensure that public infrastructure improvements are compatible with and complement existing and future development.

Policies

- 2.1.1 Continue programs to underground overhead utility lines using Public Utility Commission funds.
- 2.1.2 Require that new development install all on-site utilities and connections to distribution systems underground, unless infeasible due to significant environmental or other constraints.
- 2.1.3 Require that infrastructure improvements which are visible along commercial street frontages and in residential neighborhoods be designed to visually complement the area in which they are located.

Objective 2.2

Ensure the timely, logical and cost effective development of infrastructure facilities.

Policies

- 2.2.1 Continue to plan for and coordinate the implementation of infrastructure requirements to meet development demands.
- 2.2.2 Establish and implement a five-year capital improvement program to upgrade and maintain the City's infrastructure.

CITY OF HAWAIIAN GARDENS
GENERAL PLAN UPDATE



**TECHNICAL
APPENDICES**

APPENDIX A
NOISE MEASUREMENTS DATA

Noise Survey

N	LN	LN	LN	LN
1				
10				
70				
50				
60				
90				
52				
99				
Leq	60			
Lmax	71			
Samples	21			

PROJECT: H6 NOISE

MEASUREMENT POSITION: 50' E OF
PIONEER ON 215TH ST
(NORTH SIDE)

DATE: 5/28

TIME: From 12:15 To 12:20

Source of noise: TRAFFIC

Distance to source: 50'

SLM Height: 4'

QUEST-215 Sound Level Meter

Serial Number: M9120045

☒ Fast

Weighting

☐ Slow

☒ A

☐ B

☐ C

☐ Line

☐ Ext

Sample Period (s): 5 MIN

Range (dB): 152 dBA

Calibration

QUEST CA-12B

Serial Number: 69120125

Atmospheric Condition

Time Observed: 12:15

Wind Direction: NA Wind vel: NA

Temp: 71 Rel. Humidity: ?

Data Record 1 of 7

OPERATOR(S) BH

LOCKMAN & ASSOCIATES

CONSULTING ENGINEERS & PLANNERS

Sheet 1 of 7

Noise Survey

PROJECT: H6 NOISE

MEASUREMENT POSITION: 20' E
OF PIONEER RD ON 223RD
(NORTH SIDE)

DATE: 5/28

TIME: From 12:33 To 12:38

Source of noise: TRAFFIC

Distance to source: ~ 20'

SLM Height: 4'

QUEST-215 Sound Level Meter

Serial Number: M9120045

☒ Fast

Weighting

☐ Slow

☒ A

☐ B

☐ C

☐ Line

☐ Ext

Sample Period (s): 5 MIN

Range (dB): 11

Calibration

QUEST CA-12B

Serial Number: 69120125

Atmospheric Condition

Time Observed: 12:33

Wind Direction: NA Wind vel: NA

Temp: 71 Rel. Humidity: ?

Data Record 2 of 2

OPERATOR(S) BH

N	LN	LN	LN	LN
1				
10				
64				
50				
60				
90				
58				
99				
Leq	61			
Lmax	69			
Samples	21			

LOCKMAN & ASSOCIATES

CONSULTING ENGINEERS & PLANNERS

Noise Survey

N	LN	LN	LN	LN
1				
10				
65				
50				
60				
90				
56				
99				
Leq	61			
Lmax	70			
Samples	21			

PROJECT: HG NOISE

MEASUREMENT POSITION: 219TH ST.
50' E OF PEDNEER
SOUTH SIDE

DATE: 4/6/92
 TIME: From 10:16 To 10:21 AM

Source of noise: TRAFFIC

Distance to source: 50'
 SLM Height: 4'

QUEST-215 Sound Level Meter

Serial Number: M9120045

☒ Fast

Weighting

☐ Slow

☒ A

☐ B

☐ C

☐ Line ☐ Ext

Sample Period (s): 5 MIN

Range (dB): 14 dBA

Calibration

QUEST CA-12B

Serial Number: 69120125

Atmospheric Condition

Time Observed: 10:16

Wind Direction: — Wind vel: —

Temp: 70 Rel. Humidity: —

Data Record 3 of 7

OPERATOR(S) FAM / RH

Noise Survey

PROJECT: H6 NOISE

MEASUREMENT POSITION: KILLINGS -
WORTH SR. HIGH, PARKING
LOT

DATE: 4/6/92

TIME: From 10:27 To 10:32 AM

Source of noise: TRAFFIC

Distance to source: ~30'

SLM Height: 4'

QUEST-215 Sound Level Meter

Serial Number: M9120045

☒ Fast

Weighting

☐ Slow

☒ A

☐ B

☐ C

☐ Line

☐ Ext

Sample Period (s): 5 MIN

Range (dB): 17 dBA

Calibration

QUEST CA-12B

Serial Number: 69120125

Atmospheric Condition

Time Observed: 10:27

Wind Direction: — Wind vel: —

Temp: 70 Rel. Humidity: —

Data Record 4 of 7

OPERATOR(S) FAM / BHI

N	LN	LN	LN	LN
1				
10				
62				
50				
51				
90				
46				
99				
Leq	53			
Lmax	63			
Samples	21			

Noise Survey

N	LN	LN	LN	LN
1				
10				
70				
50				
62				
90				
59				
99				
Leq	64			
Lmax	71			
Samples	21			

PROJECT: 146. NOISE

MEASUREMENT POSITION: 30'
N OF CARSDO ON W SIDE
OF NORTHWICK

DATE: 4/6/02
 TIME: From 10:38 To 10:43 AM

Source of noise: TRAFFIC

Distance to source: 30'
 SLM Height: 4'

QUEST-215 Sound Level Meter

Serial Number: M9120045

☒ Fast ☐ Slow ☒ Weighting ☐ A ☐ B ☐ C

☐ Line ☐ Ext

Sample Period (s): 5 MIN
 Range (dB): 13 dBA

Calibration

QUEST CA-12B
 Serial Number: 69120125

Atmospheric Condition

Time Observed: 10:38 AM
 Wind Direction: - Wind vel: -
 Temp: 70 Rel. Humidity: -

Data Record 5 of 7

OPERATOR(S) FBI/BH

Noise Survey

PROJECT: 146 NOISE

MEASUREMENT POSITION: FURBERSON
ELEMENTARY SCHOOL
223 E ELAINE

DATE: 4/6/92

TIME: From 10:50 To 10:55

Source of noise: TRAFFIC

Distance to source: ~20'

SLM Height: 4

QUEST-215 Sound Level Meter

Serial Number: M9120045

☒ Fast

Weighting

☐ Slow

☒ A

☐ B

☐ C

☐ Line

☐ Ext

Sample Period (s): 5 sec

Range (dB): 20 dBA

Calibration

QUEST CA-12B

Serial Number: 69120125

Atmospheric Condition

Time Observed: 10:55

Wind Direction: - Wind vel: -

Temp: 70 Rel. Humidity: -

Data Record 6 of 7

OPERATOR(S) J. J. / J. J.

N	LN	LN	LN	LN
1				
10				
60				
50				
54				
90				
50				
99				
Leq	55			
Lmax	70			
Samples	21			

LOCKMAN & ASSOCIATES

CONSULTING ENGINEERS & PLANNERS

Noise Survey

N	LN	LN	LN	LN
1				
10				
53				
50				
46				
90				
44				
99				
Leq	47			
Lmax	54			
Samples	21			

PROJECT: H6 NOISE

MEASUREMENT POSITION: _____

HAUAI W. EL SITE

PARTIAL LOT

DATE: 4/6

TIME: From 10:59 To 11:04 AM

Source of noise: TRAFFIC

Distance to source: ~20'

SLM Height: 4

QUEST-215 Sound Level Meter

Serial Number: M9120045

☒ Fast

Weighting

☐ Slow

☒ A

☐ B

☐ C

☐ Line

☐ Ext

Sample Period (s): 5 MIN

Range (dB): 9 dBA

Calibration

QUEST CA-12B

Serial Number: 69120125

Atmospheric Condition

Time Observed: 10:59

Wind Direction: — Wind vel: —

Temp: 70 Rel. Humidity: —

Data Record 2 of 3

OPERATOR(S) FAM/SH

LOCKMAN & ASSOCIATES

CONSULTING ENGINEERS & PLANNERS

Sheet 7 of 7

APPENDIX B
NOISE MODEL DATA

**HAWAIIAN GARDENS NOISE MODEL BASED ON TRAFFIC COUNTS
STAMIN20 - NOISE CONTOUR MODEL
DATA INPUT**

DATA BLOCK 1, NUMBER OF VEHICLE TYPES = 6

CALIF CARS = VEHICLE TYPE 4

CALIFORNIA CARS ALGORITHM PARAMETERS = 6,0.0,05.2,38.8,0.0

CALIF MT 'MEDIUM TRUCK' = VEHICLE TYPE 5

CALIFORNIA MT ALGORITHM PARAMETERS = 7,2.3,35.3,25.6,0.0

CALIF HT 'HEAVY TRUCK' = VEHICLE TYPE 6

CALIFORNIA HT ALGORITHM PARAMETERS = 8,8.0,50.4,19.2,0.0

DATA BLOCK 2, TRAFFIC NOISE SOURCE

TYPE VEH/HOUR SPEED (MPH)

BLOOMFIELD N/O CARSON

'VEH4' 1129 40

'VEH5' 1 40

'VEH6' 59 40

CARSON W/O ELAINE

'VEH4' 2620 40

'VEH5' 1 40

'VEH6' 137 40

CARSON E/O JUAN

'VEH4' 2587 40

'VEH5' 1 40

'VEH6' 136 40

TYPE VEH/HOUR SPEED (MPH)

CARSON W/O NORWALK

'VEH4' 2780 40

'VEH5' 1 40

'VEH6' 146 40

CARSON E/O NORWALK

'VEH4' 2385 40

'VEH5' 1 40

'VEH6' 125 40

CARSON E/O CLARETTA

'VEH4' 2409 40

'VEH5' 1 40

'VEH6' 127 40

NORWALK S/O CENTRALIA

'VEH4' 1503 40

'VEH5' 1 40

'VEH6' 79 40

NORWALK N/O CARSON

'VEH4' 1817 40

'VEH5' 1 40

'VEH6' 96 40

NORWALK S/O CARSON

'VEH4' 1622 40

'VEH5' 1 40

'VEH6' 85 40

TYPE VEH/HOUR SPEED (MPH)

NORWALK S/O 223RD

'VEH4' 1535 40

'VEH5' 1 40

'VEH6' 80 40

PIONEER N/O CARSON

'VEH4' 1569 40

'VEH5' 1 40

'VEH6' 83 40

PIONEER S/O CARSON

'VEH4' 1200 40

'VEH5' 1 40

'VEH6' 63 40

PIONEER N/O 219TH

'VEH4' 685 40

'VEH5' 1 40

'VEH6' 36 40

PIONEER S/O 219TH

'VEH4' 538 40

'VEH5' 1 40

'VEH6' 28 40

PIONEER N/O 223RD

'VEH4' 433 40

'VEH5' 1 40

'VEH6' 22 40

TYPE VEH/HOUR SPEED (MPH)

BELSHIRE N/O CARSON

'VEH4' 171 40

'VEH5' 1 40

'VEH6' 9 40

BELSHIRE S/O CARSON

'VEH4' 235 40

'VEH5' 1 40

'VEH6' 12 40

CENTRALIA W/O NORWALK

'VEH4' 1408 40

'VEH5' 1 40

'VEH6' 74 40

CLARETTA N/O CARSON

'VEH4' 178 40

'VEH5' 1 40

'VEH6' 9 40

JUAN N/O CARSON

'VEH4' 159 40

'VEH5' 1 40

'VEH6' 8 40

JUAN S/O CARSON

'VEH4' 113 40

'VEH5' 1 40

'VEH6' 6 40

TYPE VEH/HOUR SPEED (MPH)

VIOLETTA S/O CARSON

'VEH4' 50 40

'VEH5' 1 40

'VEH6' 3 40

214TH E/O NORWALK

'VEH4' 115 40

'VEH5' 1 40 'VEH5' 1 40

'VEH6' 6 40

214TH W/O NORWALK

'VEH4' 291 40

'VEH5' 1 40

'VEH6' 15 40

215TH E/O PIONEER

'VEH4' 233 40

'VEH5' 1 40

'VEH6' 12 40

219TH E/O PIONEER

'VEH4' 186 40

'VEH5' 1 40

'VEH6' 9 40

219TH E/O JUAN

'VEH4' 323 40

'VEH5' 1 40

'VEH6' 17 40

TYPE VEH/HOUR SPEED (MPH)

219TH W/O NORWALK

'VEH4' 250 40

'VEH5' 1 40

'VEH6' 13 40

221ST W/O ELAINE

'VEH4' 140 40

'VEH5' 1 40

'VEH6' 7 40

221ST E/O NORWALK

'VEH4' 261 40

'VEH5' 1 40

'VEH6' 14 40

223RD E/O PIONEER

'VEH4' 191 40

'VEH5' 1 40

'VEH6' 10 40

223RD W/O NORWALK

'VEH4' 461 40

'VEH5' 1 40

'VEH6' 24 40

223RD E/O NORWALK

'VEH4' 106 40

'VEH5' 1 40

'VEH6' 6 40

TYPE VEH/HOUR SPEED (MPH)

226TH W/O NORWALK

'VEH4' 172 40

'VEH5' 1 40

'VEH6' 9 40

FICTIONAL SOURCE COORDINATES

EAST END -10000 0 0 0

WEST END 10000 0 0 0

CONTROL LINE 3, NUMBER OF BARRIERS = 0

CONTROL LINE 4 = NOT USED

CONTROL LINE 5, NUMBER OF RECEIVERS = 4

FOR MODELING PURPOSES HYPOTHETICAL RECEIVERS WERE ASSUMED TO BE AT THE FOLLOWING LOCATIONS:

'50 FT' FROM ROAD CENTERLINE AND FIVE FEET ABOVE THE GROUND

'100 FT' FROM ROAD CENTERLINE AND FIVE FEET ABOVE THE GROUND

'200 FT' FROM ROAD CENTERLINE AND FIVE FEET ABOVE THE GROUND

'300 FT' FROM ROAD CENTERLINE AND FIVE FEET ABOVE THE GROUND

CONTROL LINE 6, FACTOR CODING = 1

ALPHA FACTORS

0.5, 0.5, 0.5, 0.5

CONTROL LINE 7 = END DATA

MODELING ASSUMPTIONS

In cases where pertinent information regarding traffic characteristics was not available, Lockman & Associates was compelled to make several assumptions. These assumptions include:

1. - Peak hourly traffic levels were taken to be %10 of the 24 hour total traffic count.
2. - Truck composition was taken to be %5 of the total traffic count.

Lockman & Associates feels that these assumptions are conservative and illustrate a maximum noise level scenario. According to the Transportation and Traffic Engineering Handbook, national surveys show actual peak traffic levels to be close to %9 of the daily total traffic count, thus making assumption number 1 slightly more conservative.

Similarly, with regards to assumption number 2, modeling parameters were specified to account for heavy duty trucks which are associated with the highest dBA levels, when in actuality the City of Hawaiian Gardens truck composition of traffic most likely includes a larger percentage of medium duty trucks such as daily delivery vans, which are associated with lower dBA levels.

**HAWAIIAN GARDENS dBA LEVELS
MODELED BY STAMIN20
OUTPUT DATA FILE**

BLOOMFIELD N/O CARSON

	LEQ(H)	SIG	L10	L50	L90
0 FT	73.4				
50 FT	68.9	5.9	72.5	64.9	57.4
100 FT	64.4	5.0	67.9	61.6	55.2
200 FT	59.8	4.0	63.1	58.0	52.9
300 FT	57.1	3.5	60.2	55.8	51.3

CARSON W/O ELAINE

	LEQ(H)	SIG	L10	L50	L90
50 FT	72.6	4.7	76.1	70.0	63.9
100 FT	68.0	3.8	71.3	66.4	61.5
200 FT	63.5	2.9	66.2	62.5	58.7
300 FT	60.8	2.5	63.3	60.1	56.9

CARSON E/O JUAN

	LEQ(H)	SIG	L10	L50	L90
50 FT	72.5	4.8	6.0	69.9	63.8
100 FT	68.0	3.8	71.2	66.3	61.4
200 FT	63.4	2.9	66.2	62.4	58.7
300 FT	60.7	2.5	63.2	60.0	56.8

CARSON W/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	72.8	4.7	76.3	70.3	64.4
75 FT	70.55				
100 FT	68.3	3.7	71.5	66.7	62.0
200 FT	63.8	2.9	66.5	62.8	59.2
300 FT	61.1	2.4	63.5	60.4	57.3

CARSON E/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	72.2	4.9	75.7	69.4	63.2
100 FT	67.6	3.9	70.9	65.9	60.8
200 FT	63.1	3.0	65.9	62.0	58.1
300 FT	60.4	2.6	62.9	59.6	56.3

CARSON E/O CLARETTA

	LEQ(H)	SIG	L10	L50	L90
50 FT	72.2	4.9	75.7	69.5	63.3
100 FT	67.7	3.9	71.0	65.9	60.9
200 FT	63.1	3.0	66.0	62.1	58.2
300 FT	60.4	2.6	63.0	59.7	56.4

NORWALK S/O CENTRALIA

	LEQ(H)	SIG	L10	L50	L90
50 FT	70.2	5.5	73.7	66.7	59.6
100 FT	65.7	4.6	69.1	63.3	57.4
200 FT	61.1	3.6	64.2	59.6	54.9
300 FT	58.4	3.1	61.3	57.3	53.3

NORWALK N/O CARSON

	LEQ(H)	SIG	L10	L50	L90
50 FT	71.0	5.2	74.6	67.8	61.1
100 FT	66.5	4.3	69.9	64.4	58.9
200 FT	61.9	3.4	64.9	60.6	56.3
300 FT	59.2	2.9	62.0	58.3	54.6

NORWALK S/O CARSON

	LEQ(H)	SIG	L10	L50	L90
50 FT	70.5	5.4	74.1	67.1	60.2
100 FT	66.0	4.5	69.4	63.7	58.0
200 FT	61.4	3.5	64.5	60.0	55.5
300 FT	58.7	3.0	61.5	57.7	53.8

NORWALK S/O 223RD

	LEQ(H)	SIG	L10	L50	L90
50 FT	70.2	5.5	73.8	66.8	59.8
100 FT	65.7	4.5	69.2	63.4	57.6
200 FT	61.2	3.6	64.3	59.7	55.1
300 FT	8.5	3.1	61.3	57.4	53.4

PIONEER N/O CARSON

	LEQ(H)	SIG	L10	L50	L90
50 FT	70.4	5.5	73.9	67.0	60.0
100 FT	65.9	4.5	69.3	63.5	57.8
200 FT	61.3	3.6	64.4	59.8	55.3
300 FT	58.6	3.1	61.4	57.5	53.6

PIONEER S/O CARSON

	LEQ(H)	SIG	L10	L50	L90
50 FT	69.2	5.8	72.7	65.3	57.9
100 FT	64.7	4.9	68.2	62.0	55.7
200 FT	60.1	3.9	63.4	58.3	53.3
300 FT	57.4	3.4	60.4	56.1	51.8

PIONEER N/O 219TH

	LEQ(H)	SIG	L10	L50	L90
50 FT	66.8	6.6	70.2	61.8	53.4
100 FT	62.3	5.6	65.8	58.6	51.4
200 FT	57.7	4.7	61.2	55.2	49.2
300 FT	55.0	4.1	58.3	53.0	47.8

PIONEER S/O 219TH

	LEQ(H)	SIG	L10	L50	L90
50 FT	65.7	6.9	69.1	60.3	51.5
100 FT	61.2	6.0	64.7	57.1	49.5
200 FT	56.6	5.0	60.1	53.7	47.3
300 FT	53.9	4.5	57.3	51.6	45.9

PIONEER N/O 223RD

	LEQ(H)	SIG	L10	L50	L90
50 FT	64.7	7.1	68.0	58.9	49.7
100 FT	60.2	6.3	63.7	55.7	47.7
200 FT	55.6	5.3	59.2	52.4	45.6
300 FT	52.9	4.8	56.4	50.3	44.2

BELSHIRE N/O CARSON

	LEQ(H)	SIG	L10	L50	L90
50 FT	60.8	8.2	63.6	53.1	42.6
100 FT	56.3	7.4	59.5	50.0	40.5
200 FT	51.7	6.5	55.2	46.8	38.5
300 FT	49.0	6.0	52.6	44.9	37.2

BELSHIRE S/O CARSON**BELSHIRE S/O CARSON**

	LEQ(H)	SIG	L10	L50	L90
50 FT	62.1	7.9	65.1	55.0	44.9
100 FT	57.6	7.0	60.9	51.9	42.9
200 FT	53.0	6.1	56.5	48.7	40.8
300 FT	50.3	5.6	53.9	46.7	39.6

CENTRALIA W/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	69.9	5.6	73.5	66.3	59.1
100 FT	65.4	4.6	68.8	62.9	56.9
200 FT	60.8	3.7	64.0	59.2	54.5
300 FT	58.1	3.2	61.0	56.9	52.9

CLARETTA N/O CARSON

	LEQ(H)	SIG	L10	L50	L90
50 FT	60.9	8.2	63.7	53.2	42.8
100 FT	56.4	7.4	59.6	50.1	40.7
200 FT	51.8	6.5	55.3	47.0	38.7
300 FT	49.1	6.0	52.7	45.0	37.4

JUAN N/O CARSON

	LEQ(H)	SIG	L10	L50	L90
50 FT	60.4	8.3	63.1	52.5	41.9
100 FT	55.9	7.5	59.0	49.4	39.8
200 FT	51.3	6.6	54.7	46.3	37.8
300 FT	48.6	6.1	52.1	44.3	36.5

JUAN S/O CARSON

	LEQ(H)	SIG	L10	L50	L90
50 FT	59.1	8.6	61.6	50.5	39.4
100 FT	54.6	7.9	57.5	47.4	37.4
200 FT	50.0	7.0	53.3	44.3	35.3
300 FT	47.3	6.5	50.8	42.4	34.0

VIOLETTA S/O CARSON

	LEQ(H)	SIG	L10	L50	L90
50 FT	56.0	9.4	57.8	45.8	33.8
100 FT	51.5	8.7	53.9	42.8	31.6
200 FT	46.9	7.9	49.8	39.7	29.5
300 FT	44.2	7.5	47.4	37.8	28.3

214TH E/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	59.1	8.6	61.6	50.6	39.5
100 FT	54.6	7.9	57.6	47.5	37.4
200 FT	50.0	7.0	53.3	44.4	35.4
300 FT	47.3	6.5	50.8	42.5	34.1

214TH W/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	63.0	7.6	66.1	56.4	46.6
100 FT	58.5	6.8	61.9	53.3	44.6
200 FT	54.0	5.9	57.5	50.0	42.5
300 FT	51.3	5.3	54.8	48.0	41.2

215TH E/O PIONEER

	LEQ(H)	SIG	L10	L50	L90
50 FT	62.1	7.9	65.0	55.0	44.9
100 FT	57.6	7.0	60.9	51.9	42.9
200 FT	53.0	6.1	56.5	48.7	40.8
300 FT	50.3	5.6	53.9	46.7	39.5

219TH E/O PIONEER

	LEQ(H)	SIG	L10	L50	L90
50 FT	61.0	8.1	63.8	53.4	43.0
100 FT	56.5	7.3	59.7	50.3	40.9
200 FT	51.9	6.4	55.4	47.1	38.9
300 FT	49.2	5.9	52.7	45.2	37.6

219TH E/O JUAN

	LEQ(H)	SIG	L10	L50	L90
50 FT	63.5	7.5	66.7	57.1	47.5
100 FT	59.0	6.6	62.5	54.0	45.5
200 FT	54.5	5.7	58.0	50.7	43.4
300 FT	51.8	5.2	55.3	48.7	42.1

219TH W/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	62.4	7.8	65.4	55.4	45.5
100 FT	57.9	6.9	61.2	52.3	43.4
200 FT	53.3	6.0	56.9	49.1	41.4
300 FT	50.6	5.5	54.2	47.1	40.1

221ST W/O ELAINE

	LEQ(H)	SIG	L10	L50	L90
50 FT	59.8	8.4	62.5	51.7	40.9
100 FT	55.3	7.6	58.4	48.6	38.8
200 FT	50.8	6.8	54.2	45.5	36.8
300 FT	48.1	6.3	51.6	43.5	35.5

221ST E/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	62.7	7.7	65.7	55.8	45.9
100 FT	58.1	6.9	61.5	52.7	43.9
200 FT	53.6	6.0	57.1	49.5	41.8
300 FT	50.9	5.4	54.4	47.5	40.5

223RD E/O PIONEER

	LEQ(H)	SIG	L10	L50	L90
50 FT	61.3	8.1	64.1	53.8	43.4
100 FT	56.8	7.3	60.0	50.7	41.4
200 FT	52.2	6.4	55.7	47.5	39.3
300 FT	49.5	5.9	53.0	45.5	38.0

223RD W/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	65.0	7.1	68.3	59.3	50.3
100 FT	60.5	6.2	4.0	56.1	48.3
200 FT	56.0	5.2	59.5	52.8	46.1
300 FT	53.3	4.7	56.7	50.8	44.8

22 223RD E/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	59.0	8.7	61.4	50.3	39.1
100 FT	54.4	7.9	57.4	47.2	37.1
200 FT	49.9	7.1	53.2	44.1	35.0
300 FT	47.2	6.6	50.6	42.2	33.7

226TH W/O NORWALK

	LEQ(H)	SIG	L10	L50	L90
50 FT	60.8	8.2	63.6	53.1	42.6
100 FT	56.3	7.4	59.5	50.0	40.6
200 FT	51.7	6.5	55.2	46.8	38.5
300 FT	49.0	6.0	52.6	44.9	37.2

**HAWAIIAN GARDENS PROJECTED dBA LEVELS
FOR 2012
OUTPUT DATA FILE**

BLOOMFIELD N/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	69.7	5.7	73.3	66.0	58.8
100	FT	65.2	4.7	68.7	62.7	56.6
200	FT	60.6	3.8	63.8	59.0	54.2
300	FT	57.9	3.2	60.9	56.7	52.6

CARSON W/O ELAINE

		LEQ(H)	SIG	L10	L50	L90
50	FT	73.4	4.5	76.8	71.1	65.4
100	FT	68.9	3.6	72.0	67.4	62.9
200	FT	64.3	2.7	67.0	63.5	60.0
300	FT	61.6	2.3	64.0	61.0	58.1

CARSON E/O JUAN

		LEQ(H)	SIG	L10	L50	L90
50	FT	73.4	4.5	76.8	71.0	65.3
100	FT	68.8	3.6	71.9	67.4	62.8
200	FT	64.3	2.7	66.9	63.4	59.9
300	FT	61.6	2.3	63.9	61.0	58.0

CARSON W/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	73.7	4.4	77.1	71.4	65.8
100	FT	69.1	3.5	72.2	67.8	63.3
200	FT	64.6	2.6	67.2	63.8	60.4
300	FT	61.9	2.2	64.2	61.3	58.5

CARSON E/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	73.0	4.6	76.5	70.6	64.7
100	FT	68.5	3.7	71.6	66.9	62.2
200	FT	63.9	2.8	66.6	63.0	59.4
300	FT	61.2	2.4	63.6	60.6	57.5

CARSON E/O CLARRETA

		LEQ(H)	SIG	L10	L50	L90
50	FT	73.0	4.6	76.5	70.6	64.7
100	FT	68.5	3.7	71.7	67.0	62.3
200	FT	64.0	2.8	66.6	63.0	59.5
300	FT	61.3	2.4	63.6	60.6	57.6

NORWALK S/O CENTRALIA

		LEQ(H)	SIG	L10	L50	L90
50	FT	71.0	5.2	74.6	67.8	61.1
100	FT	66.5	4.3	69.9	64.4	58.9
200	FT	61.9	3.4	64.9	60.6	56.3
300	FT	59.2	2.9	62.0	58.3	54.6

NORWALK N/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	71.8	5.0	75.3	69.0	62.6
100	FT	67.3	4.0	70.6	65.4	60.3
200	FT	62.7	3.1	65.6	61.6	57.6
300	FT	60.0	2.7	62.6	59.2	55.8

NORWALK S/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	71.2	5.2	74.8	68.2	61.5
100	FT	66.7	4.2	70.1	64.7	59.3
200	FT	62.2	3.3	65.1	60.9	56.7
300	FT	59.5	2.8	62.2	58.5	54.9

NORWALK S/O 223RD

		LEQ(H)	SIG	L10	L50	L90
50	FT	71.1	5.2	74.6	68.0	61.3
100	FT	66.6	4.3	69.9	64.5	59.0
200	FT	62.0	3.3	65.0	60.7	56.4
300	FT	59.3	2.9	62.0	58.4	54.7

PIONEER N/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	71.2	5.2	74.7	68.1	61.4
100	FT	66.7	4.2	70.0	64.6	59.2
200	FT	62.1	3.3	65.1	60.8	56.6
300	FT	59.4	2.8	62.1	58.5	54.9

PIONEER S/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	70.0	5.6	73.6	66.5	59.3
100	FT	65.5	4.6	68.9	63.1	57.2
200	FT	60.9	3.7	64.1	59.4	54.7
300	FT	58.2	3.2	61.1	57.1	53.0

PIONEER N/O 219 TH

		LEQ(H)	SIG	L10	L50	L90
50	FT	67.6	6.3	71.1	63.0	54.9
100	FT	63.0	5.4	66.6	59.7	52.8
200	FT	58.5	4.4	61.9	56.2	50.6
300	FT	55.8	3.9	59.0	54.1	49.1

PIONEER S/O 219 TH

		LEQ(H)	SIG	L10	L50	L90
50	FT	66.5	6.6	70.0	61.5	53.0
100	FT	62.0	5.7	65.6	58.3	51.0
200	FT	57.4	4.8	60.9	54.9	48.8
300	FT	54.8	4.2	58.1	52.7	47.4

PIONEER N/O 223 RD

		LEQ(H)	SIG	L10	L50	L90
50	FT	65.6	6.9	69.0	60.2	51.4
100	FT	61.1	6.0	64.7	57.0	49.3
200	FT	56.6	5.1	60.1	53.6	47.2
300	FT	53.9	4.5	57.3	51.5	45.8

BELSHIRE N/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	61.7	8.0	64.6	54.3	44.1
100	FT	57.1	7.2	60.4	51.3	42.1
200	FT	52.6	6.3	56.1	48.1	40.0
300	FT	49.9	5.7	53.4	46.1	38.8

BELSHIRE S/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	63.0	7.6	66.1	56.3	46.6
100	FT	58.5	6.8	61.9	53.2	44.5
200	FT	53.9	5.9	57.5	50.0	42.4
300	FT	51.2	5.3	54.8	48.0	41.2

CENTRALIA W/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	70.7	5.3	74.3	67.5	60.7
100	FT	66.2	4.4	69.6	64.0	58.4
200	FT	61.7	3.4	64.7	60.3	55.9
300	FT	59.0	3.0	61.7	58.0	54.2

CLARRETA N/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	61.7	7.9	64.7	54.5	44.3
100	FT	57.2	7.1	60.5	51.4	42.3
200	FT	52.7	6.2	56.2	48.2	40.2
300	FT	50.0	5.7	53.5	46.2	38.9

JUAN N/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	61.3	8.1	64.1	53.8	43.5
100	FT	56.8	7.3	60.0	50.7	41.4
200	FT	52.2	6.4	55.7	47.5	39.4
300	FT	49.5	5.8	53.1	45.6	38.1

JUAN S/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	59.8	8.4	62.4	51.7	40.9
100	FT	55.3	7.6	58.4	48.6	38.8
200	FT	50.7	6.8	54.1	45.4	36.7
300	FT	48.0	6.3	51.6	43.5	35.5

VIOLETA S/O CARSON

		LEQ(H)	SIG	L10	L50	L90
50	FT	56.4	9.2	58.4	46.5	34.7
100	FT	51.8	8.5	54.4	43.5	32.6
200	FT	47.3	7.7	50.3	40.4	30.5
300	FT	44.6	7.3	47.8	38.5	29.2

214 TH E/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	59.9	8.4	62.5	51.7	40.9
100	FT	55.3	7.6	58.4	48.6	38.9
200	FT	50.8	6.8	54.2	45.5	36.8
300	FT	48.1	6.3	51.6	43.6	35.6

214 W/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	64.0	7.4	67.2	57.7	48.3
100	FT	59.5	6.5	62.9	54.6	46.3
200	FT	54.9	5.6	58.5	51.3	44.2
300	FT	52.2	5.0	55.7	49.3	42.9

215 TH E/O PIONEER

		LEQ(H)	SIG	L10	L50	L90
50	FT	63.0	7.6	66.1	56.3	46.5
100	FT	58.5	6.8	61.9	53.2	44.5
200	FT	53.9	5.9	57.5	49.9	42.4
300	FT	51.2	5.3	54.8	48.0	41.1

219 TH E/O PIONEER

		LEQ(H)	SIG	L10	L50	L90
50	FT	62.0	7.9	64.9	54.8	44.7
100	FT	57.5	7.1	60.8	51.7	42.7
200	FT	52.9	6.2	56.4	48.5	40.6
300	FT	50.2	5.6	53.8	46.5	39.3

219 TH E/O JUAN

		LEQ(H)	SIG	L10	L50	L90
50	FT	64.4	7.2	67.7	58.4	49.1
100	FT	59.9	6.4	63.4	55.2	47.1
200	FT	55.3	5.4	58.9	51.9	45.0
300	FT	52.6	4.9	56.2	49.9	43.7

219 TH W/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	63.3	7.5	66.4	56.7	47.1
100	FT	58.8	6.7	62.2	53.6	45.0
200	FT	54.2	5.8	57.8	50.4	43.0
300	FT	51.5	5.2	55.1	48.4	41.7

221 ST W/O ELAINE

		LEQ(H)	SIG	L10	L50	L90
50	FT	60.8	8.2	63.6	53.1	42.5
100	FT	56.3	7.4	59.5	50.0	40.5
200	FT	51.7	6.5	55.2	46.8	38.4
300	FT	49.0	6.0	52.6	44.9	37.2

221 ST E/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	63.5	7.5	66.6	57.1	47.5
100	FT	59.0	6.6	62.4	53.9	45.4
200	FT	54.4	5.7	58.0	50.7	43.3
300	FT	51.7	5.2	55.3	48.7	42.0

223 RE E/O PIONEER

		LEQ(H)	SIG	L10	L50	L90
50	FT	62.1	7.9	65.0	55.0	44.9
100	FT	57.6	7.0	60.9	51.9	42.9
200	FT	53.0	6.1	56.5	48.7	40.8
300	FT	50.3	5.6	53.9	46.7	39.5

223 RD W/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	66.0	6.8	69.3	60.6	51.9
100	FT	61.4	5.9	65.0	57.4	49.9
200	FT	56.9	4.9	60.4	54.1	47.7
300	FT	54.2	4.4	57.6	52.0	46.3

223 RD E/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	59.7	8.5	62.3	51.4	40.5
100	FT	55.2	7.7	58.2	48.3	38.5
200	FT	50.6	6.9	54.0	45.2	36.4
300	FT	47.9	6.4	51.4	43.3	35.2

226 TH W/O NORWALK

		LEQ(H)	SIG	L10	L50	L90
50	FT	61.7	8.0	64.6	54.4	44.1
100	FT	57.2	7.2	60.4	51.3	42.1
200	FT	52.6	6.3	56.1	48.1	40.0
300	FT	49.9	5.7	53.5	46.1	38.8

**APPENDIX C
SB 547 COMPLIANCE**



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (818) 458-5100

THOMAS A. TIDEMANSON, Director
CECIL E. BUGH, Chief Deputy Director
MAS NAGAMI, Assistant Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

November 29, 1989

IN REPLY PLEASE
REFER TO FILE:

City of Hawaiian Gardens
21815 Pioneer Boulevard
Hawaiian Gardens, California 90716

Attention Mr. Ronald Downing
City Manager

Dear Mr. Downing:

COMPLIANCE WITH SB 547 - SEISMIC SAFETY LAW

Under Senate Bill 547, the City of Hawaiian Gardens is required to identify all unreinforced masonry (URM) buildings that are potentially hazardous; develop and implement a mitigation program, and submit the required survey and mitigation program to the Seismic Safety Commission and City Counsel by January 1, 1990.

The Los Angeles County Building and Safety Division has completed its survey for the City of Hawaiian Gardens and has found no URM buildings.

Attached for your review and approval is a copy of your URM Seismic Report to be forwarded to the Seismic Safety Commission, 1900 K Street, Suite 100, Sacramento, California, 95814-4186, attention Mr. Fred Turner.

Attached for your information is a copy of the SB 547 with an explanation.

If you have any questions or comments, please contact me at (213) 804-2588.

Very truly yours,

T. A. TIDEMANSON
Director of Public Works

Edwin G. Bargemann

Edwin G. Bargemann
District Building and Safety Engineer

EGB:jf

cc: Abe Hamad

Exhibit I
Report to Seismic Safety Commission

Date of Report November 28, 1989
City Hawaiian Gardens County Los Angeles
Contact Person: Name Edwin Bargemann
Street Address 16600 Civic Center Drive
City Bellflower, California Zip 90706
Telephone (213) 804-2588

- **Identifying Buildings**
- Number of Buildings Identified as "Potentially Hazardous Buildings"

Type of Bldg. by Use (primary use)	No. of Bldgs.	Total Sq. Ft.
Retail	0	-
Office	0	-
Residential	0	-
School: Pre-school	0	-
School: K - 12	0	-
School: College	0	-
Hotel	0	-
Restaurant	0	-
Theater	0	-
Industrial	0	-
Warehouse	0	-
Garage	0	-
Public Utility	0	-
Hospital	0	-
Police Department	0	-
Fire Department	0	-
Jail	0	-
Church	0	-
Other	0	-
Total	0	-

Type of Bldgs. by Structural System	No. of Bldgs.	Total Sq. Ft.
Bearing Wall	0	-
Steel Frame	0	-
Concrete Frame	0	-
Other	0	-
Total	0	-

- Number of other buildings considered to be historic buildings: 0 Approx. total sq.ft: -
- Is field survey complete? ☒ Yes ☐ No
If not, estimated date of completion: -
- Is office verification complete? ☒ Yes ☐ No
If not, estimated date of completion: -

• Mitigating Building Hazards

Type of Bldg. by Use (primary use)	No. of Bldgs. w/ Notified Owners	No. of Mitigated Bldgs.
Retail	0	0
Office	0	0
Residential	0	0
School: Pre-school	0	0
School: K - 12	0	0
School: College	0	0
Hotel	0	0
Restaurant	0	0
Theater	0	0
Industrial	0	0
Warehouse	0	0
Garage	0	0
Public Utility	0	0
Hospital	0	0
Police Department	0	0
Fire Department	0	0
Jail	0	0
Church	0	0
Other	0	0
Total	0	0

Type of Bldgs. by Structural System	No. of Bldgs. w/ Notified Owners	No. of Bldgs. w/ Hazards Mitigated
Bearing Wall	0	0
Steel Frame	0	0
Concrete Frame	0	0
Other	0	0
Total	0	0

- Number of historic buildings with owners notified: None
- Number of historic buildings with hazards mitigated: None
- Have all owners been notified? ☒ Yes ☐ No
If not, estimated date of completion: -
- Have hazards in all identified buildings been mitigated? ☒ Yes ☐ No
If not, estimated date of completion: -
- Number of historic buildings processed under the State Historical Building Code: None

• Mitigation Program

- Did your jurisdiction have an existing mitigation program? ☒ Yes ☐ No
- Did your jurisdiction adopt a mitigation program pursuant to the URM Law? ☒ Yes ☐ No
(If so, please summarize the type of mitigation program and attach a copy of the program.)

• Mitigation Requirements: (Check as many as appropriate)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Engineer's structural report | <input type="checkbox"/> Change of use/occupancy |
| <input checked="" type="checkbox"/> Wall anchors | <input checked="" type="checkbox"/> Posting of buildings |
| <input checked="" type="checkbox"/> Structural upgrade requiring more than wall anchors. | <input checked="" type="checkbox"/> Demolition |
| | <input type="checkbox"/> Other |

Level of force based on: _____

- ☒ Notices to owners

Additional description: The City of Hawaiian Gardens adopted Chapter 96
of the Los Angeles County Building Code as the mitigation
program for URM buildings.

APPENDIX D
1990 CENSUS SUMMARY
CITY OF HAWAIIAN GARDENA

STATE: CALIFORNIA COUNTY: LOS ANGELES

PLACE: Hawaiian Gardens city

P1/4. PERSONS BY URBAN/RURAL RESIDENCE
(UNIVERSE: PERSONS)

TOTAL	13639
URBAN:	
INSIDE URBANIZED AREAS	--
OUTSIDE URBANIZED AREAS	--
RURAL	--
NOT DEFINED FOR THIS FILE	13639

P5. SEX
(UNIVERSE: PERSONS)

MALE	7147
FEMALE	6492

P6/7. RACE
(UNIVERSE: PERSONS)

WHITE	8379
BLACK	620
AMERICAN INDIAN, ESKIMO OR ALEUT	121
AMERICAN INDIAN	119
ESKIMO	2
ALEUT	0
ASIAN OR PACIFIC ISLANDER	1285
ASIAN:	
CHINESE	51
FILIPINO	288
JAPANESE	44
ASIAN INDIAN	47
KOREAN	615
VIETNAMESE	45
CAMBODIAN	90
HMONG	0
LAOTIAN	0
THAI	18
OTHER ASIAN	43
PACIFIC ISLANDER	
POLYNESIAN:	
HAWAIIAN	14
SAMOAN	10
TONGAN	12
OTHER POLYNESIAN	0
MICRONESIAN:	
GUAMANIAN	8
OTHER MICRONESIAN	0
MELANESIAN	0
PAC. ISL., NOT SPECIFIED	0
OTHER RACE	3234

P2. FAMILIES
(UNIVERSE: FAMILIES)

TOTAL	2722
-------	------

P13. HISPANIC ORIGIN BY SEX BY AGE
(UNIVERSE: PERSONS OF HISP. ORIGIN)

	MALE	FEMALE
UNDER 1 YEAR	118	95
1 AND 2 YEARS	260	232
3 AND 4 YEARS	245	210
5 YEARS	111	94
6 YEARS	104	94
7 TO 9 YEARS	322	328
10 AND 11 YEARS	173	174
12 AND 13 YEARS	188	148
14 YEARS	91	101
15 YEARS	109	82
16 YEARS	91	67
17 YEARS	121	73
18 YEARS	120	90
19 YEARS	133	86
20 YEARS	144	91
21 YEARS	142	76
22 TO 24 YEARS	396	307
25 TO 29 YEARS	599	429
30 TO 34 YEARS	484	353
35 TO 39 YEARS	322	288
40 TO 44 YEARS	211	190
45 TO 49 YEARS	126	138
50 TO 54 YEARS	85	89
55 TO 59 YEARS	90	97
60 AND 61 YEARS	28	25
62 TO 64 YEARS	25	42
65 TO 69 YEARS	47	49
70 TO 74 YEARS	23	37
75 TO 79 YEARS	18	25
80 TO 84 YEARS	12	16
85 YEARS AND OVER	6	8

P9. HISPANIC ORIGIN
(UNIVERSE: PERSONS)

NOT OF HISPANIC ORIGIN	4561
HISPANIC ORIGIN:	
MEXICAN	8383
PUERTO RICAN	73
CUBAN	22
OTHER HISPANIC	600

P3. HOUSEHOLDS
(UNIVERSE: HOUSEHOLDS)

TOTAL	3395
-------	------

P8/10. PERSONS BY HISPANIC ORIGIN
BY RACE
(UNIVERSE: PERSONS)

NOT OF HISPANIC ORIGIN:	
WHITE	2695
BLACK	579
AMERICAN INDIAN, ESKIMO, OR ALEUT	62
ASIAN OR PACIFIC ISLANDER	1214
OTHER RACE	11

HISPANIC ORIGIN	9078
-----------------	------

WHITE	5684
BLACK	41
AMERICAN INDIAN, ESKIMO, OR ALEUT	59
ASIAN OR PACIFIC ISLANDER	71
OTHER RACE	3223

P14. SEX BY MARITAL STATUS
(UNIVERSE: PERSONS 15 YEARS & OVER)

	MALE	FEMALE
NEVER MARRIED	2128	1306
NOW MARRIED,		
EXCEPT SEPARATED	2445	2235
SEPARATED	96	194
WIDOWED	73	353
DIVORCED	247	438

P17. PERSONS IN FAMILIES
(UNIVERSE: PERSONS IN FAMILIES)

TOTAL	11683
-------	-------

P17A. PERSONS PER FAMILY
(UNIVERSE: PERSONS IN FAMILIES)

PERSONS PER FAMILY	4.29
--------------------	------

STATE: CALIFORNIA COUNTY: LOS ANGELES

PLACE: Hawaiian Gardens city

P11. AGE (UNIVERSE: PERSONS)

AGE IN YEARS	PERSONS	AGE IN YEARS	PERSONS	AGE IN YEARS	PERSONS
UNDER 1 YEAR.....	292	17 YEARS.....	255	50 TO 54 YEARS.....	391
1 AND 2 YEARS.....	650	18 YEARS.....	280	55 TO 59 YEARS.....	353
3 AND 4 YEARS.....	619	19 YEARS.....	292	60 AND 61 YEARS.....	130
5 YEARS.....	269	20 YEARS.....	303	62 TO 64 YEARS.....	156
6 YEARS.....	271	21 YEARS.....	298	65 TO 69 YEARS.....	253
7 TO 9 YEARS.....	861	22 TO 24 YEARS.....	920	70 TO 74 YEARS.....	180
10 AND 11 YEARS.....	469	25 TO 29 YEARS.....	1471	75 TO 79 YEARS.....	126
12 AND 13 YEARS.....	449	30 TO 34 YEARS.....	1268	80 TO 84 YEARS.....	84
14 YEARS.....	244	35 TO 39 YEARS.....	1029	85 YEARS AND OVER.....	44
15 YEARS.....	249	40 TO 44 YEARS.....	746		
16 YEARS.....	208	45 TO 49 YEARS.....	479		

P12. PERSONS BY AGE, RACE AND SEX

(UNIVERSE: PERSONS)

	WHITE		BLACK		AMERICAN INDIAN, ESKIMO OR ALEUT		ASIAN OR PACIFIC ISLANDER		OTHER RACE	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
UNDER 1 YEAR	86	82	18	11	3	3	7	11	39	32
1 AND 2 YEARS	199	193	17	17	1	5	31	20	87	80
3 AND 4 YEARS	218	170	17	21	3	1	24	19	74	72
5 YEARS	94	77	13	5	0	2	11	6	34	27
6 YEARS	82	83	8	6	1	1	11	10	41	28
7 TO 9 YEARS	236	260	28	21	4	4	47	35	121	105
10 AND 11 YEARS	138	141	18	13	1	1	21	21	65	50
12 AND 13 YEARS	138	122	10	15	4	2	25	16	68	49
14 YEARS	64	71	3	6	1	1	11	11	36	40
15 YEARS	67	63	3	0	4	1	10	11	54	36
16 YEARS	71	48	5	7	0	2	7	8	30	30
17 YEARS	90	54	2	6	1	2	16	12	47	25
18 YEARS	87	78	1	4	2	1	21	9	42	35
19 YEARS	109	61	3	9	2	0	15	9	42	42
20 YEARS	121	75	7	6	0	1	11	9	40	33
21 YEARS	111	71	5	4	3	1	12	14	51	26
22 TO 24 YEARS	326	251	18	17	4	2	32	29	126	115
25 TO 29 YEARS	523	390	40	52	6	6	38	52	206	158
30 TO 34 YEARS	441	351	21	40	5	4	48	58	177	123
35 TO 39 YEARS	325	303	23	21	7	7	69	61	114	99
40 TO 44 YEARS	212	223	13	21	3	4	53	59	83	75
45 TO 49 YEARS	146	142	7	8	2	3	32	39	44	56
50 TO 54 YEARS	116	121	5	6	1	2	34	37	32	37
55 TO 59 YEARS	107	125	5	1	3	1	14	16	39	42
60 AND 61 YEARS	36	53	2	2	0	0	7	9	12	9
62 TO 64 YEARS	43	62	3	1	0	2	9	11	11	14
65 TO 69 YEARS	73	100	0	0	0	0	17	28	16	19
70 TO 74 YEARS	59	86	2	1	0	0	10	6	3	13
75 TO 79 YEARS	33	69	1	0	0	0	5	6	4	8
80 TO 84 YEARS	25	43	0	1	0	0	2	1	6	6
85 YEARS AND OVER	12	23	0	0	0	1	1	1	5	1

STATE: CALIFORNIA COUNTY: LOS ANGELES

PLACE: Hawaiian Gardens city

P15. HOUSEHOLD TYPE AND RELATIONSHIP
(UNIVERSE: PERSONS)

IN FAMILY HOUSEHOLDS:	
HOUSEHOLDER	2722
SPOUSE	1853
CHILD:	
NATURAL-BORN OR ADOPTED	4980
STEPCHILD	224
GRANDCHILD	388
OTHER RELATIVES	1516
NONRELATIVES	906
IN NONFAMILY HOUSEHOLDS:	
HOUSEHOLDER LIVING ALONE	500
HOUSEHOLDER NOT LIVING ALONE	173
NONRELATIVES	317
IN GROUP QUARTERS:	
INSTITUTIONALIZED PERSONS	9
OTHER PERSONS IN GROUP QUARTERS	51

P16. HOUSEHOLD SIZE AND HOUSEHOLD TYPE
(UNIVERSE: HOUSEHOLDS)

1 PERSON:	
MALE HOUSEHOLDER	211
FEMALE HOUSEHOLDER	289
2 OR MORE PERSONS:	
FAMILY HOUSEHOLDS:	
MARRIED-COUPLE FAMILY:	
WITH RELATED CHILDREN	1342
NO RELATED CHILDREN	511
OTHER FAMILY:	
MALE HOUSEHOLDER,	
NO WIFE PRESENT:	
WITH RELATED CHILDREN	166
NO RELATED CHILDREN	103
FEMALE HOUSEHOLDER,	
NO HUSBAND PRESENT:	
WITH RELATED CHILDREN	450
NO RELATED CHILDREN	150
NONFAMILY HOUSEHOLDS:	
MALE HOUSEHOLDER	128
FEMALE HOUSEHOLDER	45

P20. HOUSEHOLD TYPE
(UNIVERSE: HOUSEHOLDS WITH
HOUSEHOLDER OF HISPANIC ORIGIN)

FAMILY HOUSEHOLDS:	
MARRIED-COUPLE FAMILY:	
WITH RELATED CHILDREN	928
NO RELATED CHILDREN	160
OTHER FAMILY:	
MALE HOUSEHOLDER, NO WIFE PRESENT:	
WITH RELATED CHILDREN	119
NO RELATED CHILDREN	65
FEMALE HOUSEHOLDER, NO HUSBAND PRESENT:	
WITH RELATED CHILDREN	248
NO RELATED CHILDREN	46
NONFAMILY HOUSEHOLDS:	
HOUSEHOLDER LIVING ALONE	87
HOUSEHOLDER NOT LIVING ALONE	64

P18. AGE OF HOUSEHOLD MEMBERS BY HOUSEHOLD TYPE
(UNIVERSE: HOUSEHOLDS)

HOUSEHOLDS WITH 1 OR MORE PERSONS UNDER 18 YEARS:	
FAMILY HOUSEHOLDS:	
MARRIED COUPLE FAMILY	1353
OTHER FAMILY:	
MALE HOUSEHOLDER, NO WIFE PRESENT	174
FEMALE HOUSEHOLDER, NO HUSBAND PRESENT	452
NONFAMILY HOUSEHOLDS:	
MALE HOUSEHOLDER	28
FEMALE HOUSEHOLDER	7
HOUSEHOLDS WITH NO PERSONS UNDER 18 YEARS	
FAMILY HOUSEHOLDS:	
MARRIED-COUPLE FAMILY	500
OTHER FAMILY:	
MALE HOUSEHOLDER, NO WIFE PRESENT	95
FEMALE HOUSEHOLDER, NO HUSBAND PRESENT	148
NONFAMILY HOUSEHOLDS:	
MALE HOUSEHOLDER	311
FEMALE HOUSEHOLDER	327

P21. HOUSEHOLD TYPE AND RELATIONSHIP
(UNIVERSE: PERSONS UNDER 18 YEARS)

IN HOUSEHOLDS:	
HOUSEHOLDER OR SPOUSE	3
OWN CHILD:	
IN MARRIED-COUPLE FAMILY	2941
IN OTHER FAMILY:	
MALE HOUSEHOLDER, NO WIFE PRESENT	217
FEMALE HOUSEHOLDER, NO HUSBAND PRESENT	831
OTHER RELATIVES	639
NONRELATIVES	199
IN GROUP QUARTERS:	
INSTITUTIONALIZED PERSONS	0
OTHER PERSONS IN GROUP QUARTERS	6

P24/25. HOUSEHOLDS BY HOUSEHOLD SIZE/TYPE BY AGE OF MEMBERS
(UNIVERSE: HOUSEHOLDS)

	1-PERS-HSEHLD	2-OR-MORE-PERSONS HSEHLD	FAMILY	NON-FAMILY
HOUSEHOLDS WITH:				
1 OR MORE PERSONS 60 YEARS AND OVER	207	507	25	
NO PERSONS 60 YEARS AND OVER	293	2215	148	
1 OR MORE PERSONS 65 YEARS AND OVER	170	354	16	
NO PERSONS 65 YEARS AND OVER	330	2368	157	

P26. HOUSEHOLD TYPE
(UNIVERSE: HOUSEHOLDS)

HOUSEHOLDS WITH 1 OR MORE NONRELATIVES	659
HOUSEHOLDS WITH NO NON-RELATIVES	2736

STATE: CALIFORNIA COUNTY: LOS ANGELES

PLACE: Hawaiian Gardens city

P19. RACE OF HOUSEHOLDER BY HOUSEHOLD TYPE (UNIVERSE: HOUSEHOLDS)	
WHITE:	
FAMILY HOUSEHOLDS:	
MARRIED-COUPLE FAMILY:	
WITH RELATED CHILDREN	734
NO RELATED CHILDREN	352
OTHER FAMILY:	
MALE HOUSEHOLDER, NO WIFE PRESENT:	
WITH RELATED CHILDREN	102
NO RELATED CHILDREN	77
FEMALE HOUSEHOLDER, NO HUSBAND PRESENT:	
WITH RELATED CHILDREN	270
NO RELATED CHILDREN	112
NONFAMILY HOUSEHOLDS:	
HOUSEHOLDER LIVING ALONE	421
HOUSEHOLDER NOT LIVING ALONE	142
BLACK:	
FAMILY HOUSEHOLDS:	
MARRIED-COUPLE FAMILY:	
WITH RELATED CHILDREN	51
NO RELATED CHILDREN	21
OTHER FAMILY:	
MALE HOUSEHOLDER, NO WIFE PRESENT:	
WITH RELATED CHILDREN	11
NO RELATED CHILDREN	5
FEMALE HOUSEHOLDER, NO HUSBAND PRESENT:	
WITH RELATED CHILDREN	68
NO RELATED CHILDREN	7
NONFAMILY HOUSEHOLDS:	
HOUSEHOLDER LIVING ALONE	23
HOUSEHOLDER NOT LIVING ALONE	8
AMERICAN INDIAN, ESKIMO, OR ALEUT:	
FAMILY HOUSEHOLDS:	
MARRIED-COUPLE FAMILY:	
WITH RELATED CHILDREN	12
NO RELATED CHILDREN	4
OTHER FAMILY:	
MALE HOUSEHOLDER, NO WIFE PRESENT:	
WITH RELATED CHILDREN	0
NO RELATED CHILDREN	1
(CONTINUED)	

P19. (CONTINUED)	
FEMALE HOUSEHOLDER, NO HUSBAND PRESENT:	
WITH RELATED CHILDREN	6
NO RELATED CHILDREN	0
NONFAMILY HOUSEHOLDS:	
HOUSEHOLDER LIVING ALONE	5
HOUSEHOLDER NOT LIVING ALONE	1
ASIAN OR PACIFIC ISLANDER	
FAMILY HOUSEHOLDS:	
MARRIED-COUPLE FAMILY:	
WITH RELATED CHILDREN	173
NO RELATED CHILDREN	69
OTHER FAMILY:	
MALE HOUSEHOLDER, NO WIFE PRESENT:	
WITH RELATED CHILDREN	14
NO RELATED CHILDREN	6
FEMALE HOUSEHOLDER, NO HUSBAND PRESENT:	
WITH RELATED CHILDREN	32
NO RELATED CHILDREN	15
NONFAMILY HOUSEHOLDS:	
HOUSEHOLDER LIVING ALONE	28
HOUSEHOLDER NOT LIVING ALONE	9
OTHER RACE	
FAMILY HOUSEHOLDS:	
MARRIED-COUPLE FAMILY:	
WITH RELATED CHILDREN	372
NO RELATED CHILDREN	65
OTHER FAMILY:	
MALE HOUSEHOLDER, NO WIFE PRESENT:	
WITH RELATED CHILDREN	39
NO RELATED CHILDREN	14
FEMALE HOUSEHOLDER, NO HUSBAND PRESENT:	
WITH RELATED CHILDREN	74
NO RELATED CHILDREN	16
NONFAMILY HOUSEHOLDS:	
HOUSEHOLDER LIVING ALONE	23
HOUSEHOLDER NOT LIVING ALONE	13

P22. RELATIONSHIP AND AGE (UNIVERSE: PERSONS UNDER 18)	
IN HOUSEHOLDS:	
HOUSEHOLDER OR SPOUSE	3
RELATED CHILD:	
OWN CHILD:	
UNDER 3 YEARS	714
3 AND 4 YEARS	504
5 YEARS	225
6 TO 11 YEARS	1393
12 AND 13 YEARS	399
14 YEARS	212
15 TO 17 YEARS	542
OTHER RELATIVES:	
UNDER 3 YEARS	183
3 AND 4 YEARS	85
5 YEARS	35
6 TO 11 YEARS	159
12 AND 13 YEARS	36
14 YEARS	25
15 TO 17 YEARS	116
NONRELATIVES:	
UNDER 3 YEARS	45
3 AND 4 YEARS	29
5 YEARS	8
6 TO 11 YEARS	48
12 AND 13 YEARS	14
14 YEARS	6
15 TO 17 YEARS	49
IN GROUP QUARTERS	
INSTITUTIONALIZED PERSONS:	
UNDER 3 YEARS	0
3 AND 4 YEARS	0
5 YEARS	0
6 TO 11 YEARS	0
12 AND 13 YEARS	0
14 YEARS	0
15 TO 17 YEARS	0
OTHER PERSONS IN GROUP QUARTERS:	
UNDER 3 YEARS	0
3 AND 4 YEARS	1
5 YEARS	1
6 TO 11 YEARS	1
12 AND 13 YEARS	0
14 YEARS	1
15 TO 17 YEARS	2

STATE: CALIFORNIA COUNTY: LOS ANGELES

PLACE: Hawaiian Gardens city

P23. HOUSEHOLD TYPE AND RELATIONSHIP
(UNIVERSE: PERSONS 65 YEARS AND OVER)

IN FAMILY HOUSEHOLDS:	
HOUSEHOLDER	242
SPOUSE	122
OTHER RELATIVES	109
NONRELATIVES	14
IN NONFAMILY HOUSEHOLDS:	
MALE HOUSEHOLDER	
LIVING ALONE	36
NOT LIVING ALONE	9
FEMALE HOUSEHOLDER:	
LIVING ALONE	134
NOT LIVING ALONE	4
NONRELATIVES	9
IN GROUP QUARTERS:	
INSTITUTIONALIZED PERSONS	7
OTHER PERSONS IN GROUP QUARTERS	1

P27. HOUSEHOLD TYPE AND HOUSEHOLD SIZE
(UNIVERSE: HOUSEHOLDS)

FAMILY HOUSEHOLDS:	
2 PERSONS	503
3 PERSONS	490
4 PERSONS	525
5 PERSONS	420
6 PERSONS	282
7 OR MORE PERSONS	502
NONFAMILY HOUSEHOLDS:	
1 PERSON	500
2 PERSONS	107
3 PERSONS	28
4 PERSONS	19
5 PERSONS	6
6 PERSONS	8
7 OR MORE PERSONS	5

P28. GROUP QUARTERS
(UNIVERSE: PERSONS IN GROUP QUARTERS)

INSTITUTIONALIZED PERSONS:	
CORRECTIONAL INSTITUTIONS	0
NURSING HOMES	0
MENTAL (PSYCHIATRIC) HOSPITALS	0
JUVENILE INSTITUTIONS	0
OTHER INSTITUTIONS	9
OTHER PERSONS IN GROUP QUARTERS:	
COLLEGE DORMITORIES	0
MILITARY QUARTERS	0
EMERGENCY SHELTERS FOR HOMELESS	0
VISIBLE IN STREET LOCATIONS	0
OTHER NONINSTITUTIONAL GROUP QUARTERS	51

H1/4. HOUSING UNITS BY URBAN AND RURAL
(UNIVERSE: HOUSING UNITS)

TOTAL	3518
URBAN:	
INSIDE URBANIZED AREA	--
OUTSIDE URBANIZED AREA	--
RURAL	
NOT DEFINED FOR THIS FILE	3518

H3/9. TENURE BY RACE OF HOUSEHOLDER
(UNIVERSE: OCCUPIED HOUSING UNITS)

OWNER OCCUPIED	
WHITE	1535
BLACK	1071
AMERICAN INDIAN, ESKIMO OR ALEUT	28
ASIAN OR PACIFIC ISLANDER	14
OTHER RACE	111
RENTER OCCUPIED	
WHITE	311
BLACK	1860
AMERICAN INDIAN, ESKIMO OR ALEUT	1139
ASIAN OR PACIFIC ISLANDER	166
OTHER RACE	15
OTHER RACE	
WHITE	235
BLACK	305
AMERICAN INDIAN, ESKIMO OR ALEUT	
ASIAN OR PACIFIC ISLANDER	
OTHER RACE	

H8. RACE OF HOUSEHOLDER
(UNIVERSE: OCCUPIED HOUSING UNITS)

WHITE	2210
BLACK	194
AMERICAN INDIAN, ESKIMO OR ALEUT	29
ASIAN OR PACIFIC ISLANDER	346
OTHER RACE	616

H2. OCCUPANCY STATUS
(UNIVERSE: HOUSING UNITS)

OCCUPIED	3395
VACANT	123

H10. HISPANIC ORIGIN OF HOUSEHOLDER BY RACE OF HOUSEHOLDER
(UNIVERSE: OCCUPIED HOUSING UNITS)

NOT OF HISPANIC ORIGIN:	
WHITE	1136
BLACK	186
AMERICAN INDIAN, ESKIMO OR ALEUT	18
ASIAN OR PACIFIC ISLANDER	335
OTHER RACE	3
HISPANIC ORIGIN:	
WHITE	1074
BLACK	8
AMERICAN INDIAN, ESKIMO OR ALEUT	11
ASIAN OR PACIFIC ISLANDER	11
OTHER RACE	613

H5. VACANCY STATUS
(UNIVERSE: VACANT HOUSING UNITS)

FOR RENT	66
FOR SALE ONLY	31
RENTED OR SOLD, NOT OCCUPIED	10
FOR SEASONAL, RECREATIONAL OR OCCASIONAL USE	4
FOR MIGRANT WORKERS	0
OTHER VACANT	12

H6. BOARDED-UP STATUS
(UNIVERSE: VACANT HOUSING UNITS)

BOARDED UP	6
NOT BOARDED UP	117

H7. USUAL HOME ELSEWHERE
(UNIVERSE: VACANT HOUSING UNITS)

VACANT, USUAL HOME ELSEWHERE	5
ALL OTHER VACANT	118

STATE: CALIFORNIA COUNTY: LOS ANGELES

PLACE: Hawaiian Gardens city

H11. TENURE BY RACE OF HOUSEHOLDER
(UNIVERSE: OCCUPIED HOUSING UNITS
WITH HOUSEHOLDER OF HISPANIC ORIGIN)

OWNER OCCUPIED:	
WHITE	381
BLACK	3
AMERICAN INDIAN, ESKIMO OR ALEUT	5
ASIAN OR PACIFIC ISLANDER	6
OTHER RACE	309
RENTER OCCUPIED:	
WHITE	693
BLACK	5
AMERICAN INDIAN, ESKIMO OR ALEUT	6
ASIAN OR PACIFIC ISLANDER	5
OTHER RACE	304

H16. AGGREGATE ROOMS BY VACANCY STATUS
(UNIVERSE: VACANT HOUSING UNITS)

TOTAL:	
FOR RENT	269
FOR SALE ONLY	127
RENTED OR SOLD, NOT OCCUPIED	43
FOR SEASONAL, RECREATIONAL, OR OCCASIONAL USE	15
FOR MIGRANT WORKERS	0
OTHER VACANT	49

H19/20. AGGREGATE PERSONS BY TENURE
(UNIVERSE: PERSONS IN OCCUPIED
HOUSING UNITS)

TOTAL	13579
OWNER OCCUPIED	5614
RENTER OCCUPIED	7965

H21. PERSONS PER ROOM
(UNIVERSE: OCCUPIED HOUSING UNITS)

0.50 OR LESS	989
0.51 TO 1.00	1073
1.01 TO 1.50	474
1.51 TO 2.00	442
2.01 OR MORE	417

H12. TENURE BY AGE OF HOUSEHOLDER
(UNIVERSE: OCCUPIED HOUSING UNITS)

OWNER OCCUPIED:	
15 TO 24 YEARS	28
25 TO 34 YEARS	303
35 TO 44 YEARS	379
45 TO 54 YEARS	253
55 TO 64 YEARS	248
65 TO 74 YEARS	187
75 YEARS AND OVER	137
RENTER OCCUPIED:	
15 TO 24 YEARS	201
25 TO 34 YEARS	736
35 TO 44 YEARS	484
45 TO 54 YEARS	221
55 TO 64 YEARS	117
65 TO 74 YEARS	65
75 YEARS AND OVER	36

H17. PERSONS IN UNIT
(UNIVERSE: OCCUPIED HOUSING UNITS)

1 PERSON	500
2 PERSONS	610
3 PERSONS	518
4 PERSONS	544
5 PERSONS	426
6 PERSONS	290
7 PERSONS	507

H17A. PERSONS PER OCCUPIED HOUSING UNIT
(UNIVERSE: OCCUPIED HOUSING UNITS)

PERSONS PER OCCUPIED HOUSING UNIT	4.00
--------------------------------------	------

H22. TENURE BY PERSONS PER ROOM
(UNIVERSE: OCCUPIED HOUSING UNITS)

OWNER OCCUPIED:	
0.50 OR LESS	645
0.51 TO 1.00	419
1.01 TO 1.50	170
1.51 TO 2.00	161
2.01 TO MORE	140
RENTER OCCUPIED:	
0.50 OR LESS	344
0.51 TO 1.00	654
1.01 TO 1.50	304
1.51 TO 2.00	281
2.01 OR MORE	277

H13/14. ROOMS
(UNIVERSE: HOUSING UNITS)

TOTAL	13880
1 ROOM	74
2 ROOMS	454
3 ROOMS	642
4 ROOMS	1228
5 ROOMS	797
6 ROOMS	244
7 ROOMS	49
8 ROOMS	16
9 OR MORE ROOMS	14

H15. AGGREGATE ROOMS BY TENURE
(UNIVERSE: OCCUPIED HOUSING UNITS)

TOTAL:	
OWNER OCCUPIED	6614
RENTER OCCUPIED	6763

H18. TENURE BY PERSONS IN UNIT
(UNIVERSE: OCCUPIED HOUSING UNITS)

OWNER OCCUPIED:	
1 PERSONS	332
2 PERSONS	346
3 PERSONS	180
4 PERSONS	197
5 PERSONS	153
6 PERSONS	105
7 OR MORE PERSONS	222
RENTER OCCUPIED:	
1 PERSON	168
2 PERSONS	264
3 PERSONS	338
4 PERSONS	347
5 PERSONS	273
6 PERSONS	185
7 OR MORE PERSONS	285

H18A. PERSONS PER OCCUPIED HOUSING UNIT
BY TENURE
(UNIVERSE: OCCUPIED HOUSING UNITS)

OWNER OCCUPIED	3.66
RENTER OCCUPIED	4.28

STATE: CALIFORNIA COUNTY: LOS ANGELES

PLACE: Hawaiian Gardens city

H23. VALUE
(UNIVERSE: SPECIFIED OWNER-OCCUPIED
HOUSING UNITS)

LESS THAN \$15,000	7
\$15,000 TO \$19,999	1
\$20,000 TO \$24,999	5
\$25,000 TO \$29,999	2
\$30,000 TO \$34,999	2
\$35,000 TO \$39,999	1
\$40,000 TO \$44,999	2
\$45,000 TO \$49,999	1
\$50,000 TO \$59,999	11
\$60,000 TO \$74,999	24
\$75,000 TO \$99,999	131
\$100,000 TO \$124,999	228
\$125,000 TO \$149,999	256
\$150,000 TO \$174,999	194
\$175,000 TO \$199,999	90
\$200,000 TO \$249,999	52
\$250,000 TO \$299,999	16
\$300,000 TO \$399,999	11
\$400,000 TO \$499,999	2
\$500,000 OR MORE	3

H23A/B/C/24. VALUE
(UNIVERSE: SPECIFIED OWNER-
OCCUPIED HOUSING UNITS)

AGGREGATE VALUE	146255500
LOWER VALUE QUARTILE	108000
UPPER VALUE QUARTILE	164000
MEDIAN VALUE	135200

H30. VACANCY STATUS
(UNIVERSE: VACANT HOUSING UNITS)

SPECIFIED VACANT FOR RENT	66
SPECIFIED VACANT FOR SALE ONLY	11
ALL OTHER VACANTS	46

H31. AGGREGATE PRICE ASKED
(UNIVERSE: SPECIFIED VACANT-FOR-SALE
ONLY HOUSING UNITS)

TOTAL	1712500
-------	---------

H38. AGGREGATE RENT ASKED
(UNIVERSE: SPECIFIED VACANT-FOR-RENT
HOUSING UNITS)

TOTAL	44678
-------	-------

H25. RACE OF HOUSEHOLDER
(UNIVERSE: SPECIFIED OWNER-OCCUPIED
HOUSING UNITS)

WHITE	692
BLACK	13
AMERICAN INDIAN, ESKIMO, OR ALEUT	9
ASIAN OR PACIFIC ISLANDER	75
OTHER RACE	250

H26. AGGREGATE VALUE BY RACE OF
HOUSEHOLDER
(UNIVERSE: SPECIFIED OWNER-OCCUPIED
HOUSING UNITS)

TOTAL:	
WHITE	97416500
BLACK	1855000
AMERICAN INDIAN, ESKIMO, OR ALEUT	1525000
ASIAN OR PACIFIC ISLANDER	11040000
OTHER RACE	34419000

H32. CONTRACT RENT (UNIVERSE: SPECIFIED
RENTER-OCCUPIED HOUSING UNITS)

WITH CASH RENT:	
LESS THAN \$100	1
\$100 TO \$149	8
\$150 TO \$199	19
\$200 TO \$249	22
\$250 TO \$299	22
\$300 TO \$349	83
\$350 TO \$399	89
\$400 TO \$449	227
\$450 TO \$499	151
\$500 TO \$549	166
\$550 TO \$599	176
\$600 TO \$649	186
\$650 TO \$699	200
\$700 TO \$749	177
\$750 TO \$999	263
\$1,000 OR MORE	15
NO CASH RENT	28

H32A/B/C/33. CONTRACT RENT
(UNIVERSE: SPECIFIED RENTER-OCCUPIED
HOUSING UNITS PAYING CASH RENT)

AGGREGATE RENT	1058337
LOWER CONT. RENT QUARTILE	446
UPPER CONT. RENT QUARTILE	701
MEDIAN CONTRACT RENT	583

H27. HISPANIC ORIGIN OF HOUSEHOLDER
(UNIVERSE: SPECIFIED OWNER-OCCUPIED
HOUSING UNITS)

NOT OF HISPANIC ORIGIN	442
HISPANIC ORIGIN	597

H28. AGGREGATE VALUE BY HISPANIC ORIGIN
OF HOUSEHOLDER
(UNIVERSE: SPECIFIED OWNER-OCCUPIED
HOUSING UNITS)

TOTAL:	
NOT OF HISP. ORIGIN	63741500
HISPANIC ORIGIN	82514000

H29. AGGREGATE VALUE BY UNITS IN
STRUCTURE
(UNIVERSE: OWNER-OCCUPIED HOUSING
UNITS)

TOTAL:	
1, DETACHED	122823000
1, ATTACHED	28825000
2	2277500
3 OR MORE	20970000
MOBILE HOME OR TRAILER	8828000
OTHER	3582500

H34. RACE OF HOUSEHOLDER
(UNIVERSE: SPECIFIED RENTER-OCCUPIED
HOUSING UNITS PAYING CASH RENT)

WHITE	1105
BLACK	165
AMERICAN INDIAN, ESKIMO OR ALEUT	15
ASIAN OR PACIFIC ISLANDER	231
OTHER RACE	289

H35. AGGREGATE CONTRACT RENT BY RACE OF
HOUSEHOLDER
(UNIVERSE: SPECIFIED RENTER-OCCUPIED
HOUSING UNITS PAYING CASH RENT)

TOTAL:	
WHITE	657221
BLACK	100668
AMERICAN INDIAN, ESKIMO OR ALEUT	7451
ASIAN OR PACIFIC ISLANDER	118869
OTHER RACE	174128

STATE: CALIFORNIA COUNTY: LOS ANGELES

PLACE: Hawaiian Gardens city

H41/42. UNITS IN STRUCTURE
(UNIVERSE: HOUSING UNITS)

	TOTAL	VACANT
1, DETACHED	1593	49
1, ATTACHED	429	19
2	203	6
3 OR 4	156	4
5 TO 9	241	9
10 TO 19	294	19
20 TO 49	85	2
50 OR MORE	215	6
MOBILE HOME OR TRAILER	252	9
OTHER	50	0

H36. HISPANIC ORIGIN OF HOUSEHOLDER
(UNIVERSE: SPECIFIED RENTER-OCCUPIED
HOUSING UNITS PAYING CASH RENT)

NOT OF HISPANIC ORIGIN	822
HISPANIC ORIGIN	983

H37. AGGREGATE CONTRACT RENT BY HISPANIC
ORIGIN OF HOUSEHOLDER
(UNIVERSE: SPECIFIED RENTER-OCCUPIED
HOUSING UNITS PAYING CASH RENT)

TOTAL:	
NOT OF HISP. ORIGIN	464992
HISPANIC ORIGIN	593345

H39. AGE OF HOUSEHOLDER BY MEALS INCLUDED
IN RENT
(UNIVERSE: SPECIFIED RENTER-OCCUPIED
HOUSING UNITS)

UNDER 65 YEARS:	
WITH CASH RENT:	
MEALS INCLUDED IN RENT	13
NO MEALS INCLUDED IN RENT	1697
NO CASH RENT	23
65 YEARS AND OVER:	
WITH CASH RENT:	
MEALS INCLUDED IN RENT	2
NO MEALS INCLUDED IN RENT	93
NO CASH RENT	5

H43. TENURE BY UNITS IN STRUCTURE
(UNIVERSE: OCCUPIED HOUSING UNITS)

OWNER OCCUPIED:

1, DETACHED	864
1, ATTACHED	214
2	16
3 OR 4	32
5 TO 9	33
10 TO 19	105
20 TO 49	16
50 OR MORE	4
MOBILE HOME OR TRAILER	223
OTHER	28

RENTER OCCUPIED:

1, DETACHED	680
1, ATTACHED	196
2	181
3 OR 4	120
5 TO 9	199
10 TO 19	170
20 TO 49	67
50 OR MORE	205
MOBILE HOME OR TRAILER	20
OTHER	22

H40. VACANCY STATUS BY DURATION OF
VACANCY
(UNIVERSE: VACANT HOUSING UNITS)

FOR RENT:

LESS THAN 2 MONTHS	22
2 UP TO 6 MONTHS	40
6 OR MORE MONTHS	4

FOR SALE ONLY:

LESS THAN 2 MONTHS	6
2 UP TO 6 MONTHS	20
6 OR MORE MONTHS	5

ALL OTHER VACANTS:

LESS THAN 2 MONTHS	16
2 UP TO 6 MONTHS	7
6 OR MORE MONTHS	3

H44. AGGREGATE PERSONS BY TENURE BY
UNITS IN STRUCTURE
(UNIVERSE: PERSONS IN OCCUPIED
HOUSING UNITS)

OWNER OCCUPIED:

1, DETACHED	3991
1, ATTACHED	640
2	80
3 OR 4	76
5 TO 9	67
10 TO 19	266
20 TO 49	44
50 OR MORE	11
MOBILE HOME OR TRAILER	325
OTHER	114

RENTER OCCUPIED:

1, DETACHED	3446
1, ATTACHED	899
2	895
3 OR 4	448
5 TO 9	761
10 TO 19	583
20 TO 49	183
50 OR MORE	614
MOBILE HOME OR TRAILER	51
OTHER	85

APPENDIX E
NORWALK/CARSON LAND USE DATA

LAND USES

NORWALK BOULEVARD
(BETWEEN 221ST STREET AND SOUTH CITY BOUNDARY)

Westside

Office/Commercial (vacant)

Commercial (vacant)

Grocery

Vacant

Vacant

2-story

Restaurant

Yoo Can In

Building Maint.

HGSSA, Inc.

V.C. Control

Keystone

Carpet/Flooring

Residential

Vacant

Ice Plant

Drive-Thru

Food

Eastside

Make-up

Vacant

C.B. Radio

Barber

Restaurant

Law office

Books

Legal Services

Restaurant

Flowers

Tune-Up Masters

Grocery

Auto Service

Restaurant

Donuts

LAND USES

NORWALK BOULEVARD
(BETWEEN CENTRALIA ROAD AND 215TH STREET)

Westside

U.S. Post Office

Storage

Dairy

Fire Station

Parkside Townhomes

Office Supply

Sanitary Supplies

Pipe

Antiques

Residential

Butcher

Cleaners

Eastside

Apartments

Apartments

Apartments

Apartments

Christian Center

Four Square Church

Residential

Residential

Residential

Commercial (vacant)

Tires

Residential

Stelling, Inc.

Residential (3)

Plants

Gifts

Vacant

Dentist

Vacant

Dentist

LAND USES

NORWALK BOULEVARD
(BETWEEN 215TH STREET AND CARSON STREET)

Westside

Comics

Bar

Parking

Vacant

T.V. Sales

Upholstery

Barber

Beauty

Used Cars

Parking

Auto Parts

Parts

Mall

Eastside

El Taco Loco

Clinic

Vacant

Upholstery

Garage Doors

H. G. Tribune

Paint

Pool Supplies

Bar

Residential

Bar

Dog Grooming

Hair Studio

Karate

LAND USES

CARSON AVENUE
(BETWEEN PIONEER BOULEVARD AND JUAN AVENUE)

Northside

Union 76 Service Station

Restaurant

Vacant

Dentist

Vacant

Suzuki Motorcycles

Garden Center

Thrift Shop

Beauty

Barber

Tailor

Bar

Bar

Shoes

Chief Auto

Tires-Brakes

Appliances

Shoe Repair

Mattress

Southside

Mobile Service Station

Garage

Restaurant (vacant)

Barber

Air Page

Vacant

Vacant

Vacant

Vacant

Video

Car Wash

Taco Bell

First Credit Bank

Liquor

Grocery

Tacos

Transmissions

Restaurant (Mexican)

Restaurant (Mexican)

Electronics-Retail

TV/Stereo Repair

Psychic Reader

LAND USES

CARSON AVENUE
(BETWEEN JUAN AVENUE AND NORWALK BOULEVARD)

Northside

McDonald's
Vacant
KFC Chicken
Tropical Fish
Beauty (Hairdresser)
Records (Music)
Supermarket
Bridal Shop
Clinic
Feed & Tack
Vacant
Clothing
Restaurant
Vacant
Blockbuster Video
Bank of America

Southside

Der Wienerschnitzel
Carl's Jr.
Clothing
Cleaners
Clothing
Newberry's Department Store
Library
Kids Mart
Shoes
Pharmacy
Albertson's Market
Vacant
Clothing
Video
Radio Shack
Hobbies
Dentist
Law Office
Check Cashing
Pizza
FAX Service
H&R Block
1-Hr Photo
Optometry
Popeye's Chicken

LAND USES

CARSON AVENUE
(BETWEEN NORWALK BOULEVARD AND CLARETTA/VERNE AVENUES)

Northside

Shell Gas

Restaurant

Dance Hall

Community Service

Billiard Hall

Flowers

Driving School

Restaurant

L.A. County Offices

Liquor

Restaurant

Club Guatemalan

Venture Capital

Burgers

Vacant

Insurance

Hairstyling

Bridal Shop

Laundromat

Gifts

Graphic Co.

Food Store

Thrift Shop

Tortilleria

Auto Repair

Vacant

Southside

Vacant

Auto Painting

Auto Transmission

Auto Transmission

R.V. Storage

Residence

Office

Auto Transmission

Air Condition Repair

Auto

LAND USES

CARSON AVENUE
(BETWEEN CLARETTA/VERNE AVENUES AND BLOOMFIELD AVENUE)

Northside

Auto Parts
Used Cars
Pet/Kennels
Residential
Elks Lodge
Burger King
Donuts
Aquarium
Photo Lab
Hair Cut
Optometry
Jewelry
Cleaners
Dentist
Vacant
Hallmark
Thrifty
Cloth/Fabric
Vacant
Von's Market
Video
Flowers
Dry Goods
Nails
Restaurant

Southside

Vacant
Auto Battery
Auto Radiator
Electrical
Pool Service
Auto Transmission
Truck Storage
Auto Repair
Lakewood Mobile Estates

U.C. BERKELEY LIBRARIES



C101693038

